NOVEMBER 7, 1955

"White Paper" on Weeks Report . . . p. 23

RAILWAY AGE

One of Five Simmons-Boardman Railway Publications

IN THIS ISSUE

CTC Both Ways On 3 Trucks

"Let's Settle Per Diem Business"

Safety IS First At Barstow

When to Renew Crosstie?

Hot Boxes— On the Way Out

CORRELATED UNITS MAKE HOPPERS

Structurally sound..

Your best STANDARD assembly..

All cast steel!

WINE

Hopper Frames, Adjustable Locks and Hinges

THE WINE RAILWAY APPLIANCE CO., TOLEDO 9, OHIO

BESSEMER *Inaugurates*

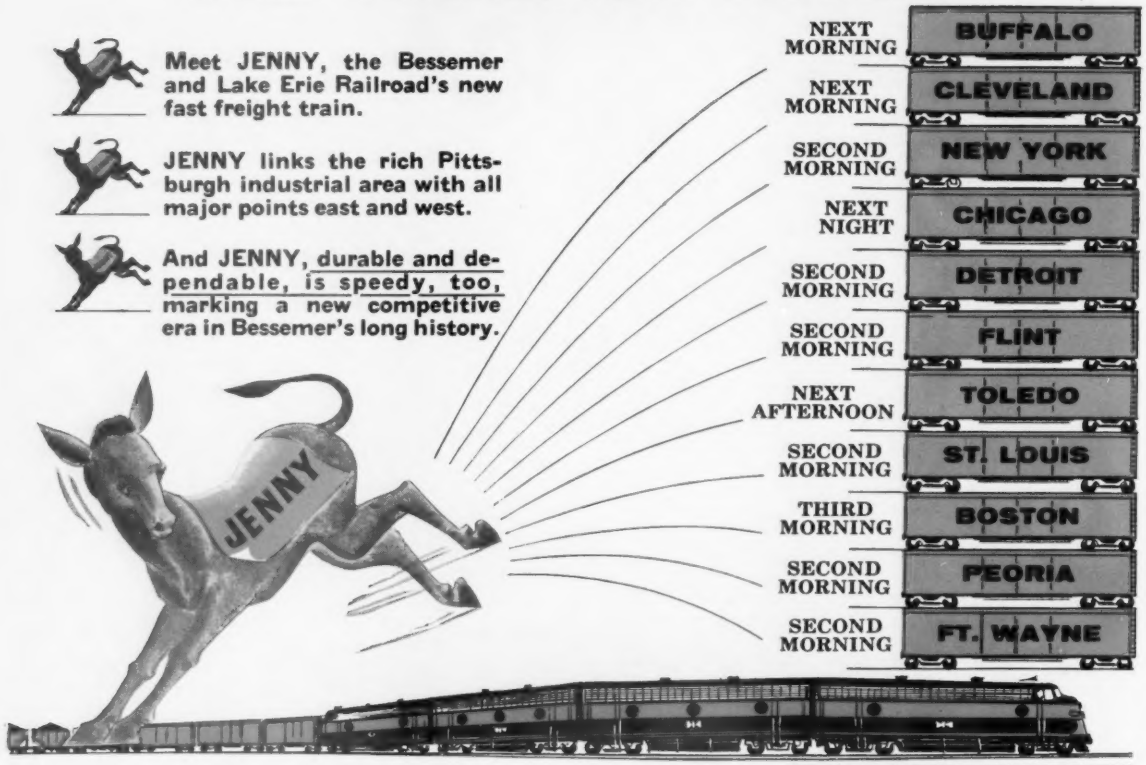
New, Fast Freight Service

from PITTSBURGH DISTRICT

Meet JENNY, the Bessemer and Lake Erie Railroad's new fast freight train.

JENNY links the rich Pittsburgh industrial area with all major points east and west.

And JENNY, durable and dependable, is speedy, too, marking a new competitive era in Bessemer's long history.



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Faster Service Provides More Cars — And More Cars Mean More Business

The Bessemer — long a dependable route from Butler and the Pittsburgh district — now offers high speed scheduled service east and west with our trunkline connections. Each night Jenny gathers her cars in the Pittsburgh-Butler District and in a mighty gallop races to the major markets, meeting our customers' requirements and producing a rapid turnover of cars.

LET JENNY DO YOUR JOB

BESSEMER AND LAKE ERIE RAILROAD

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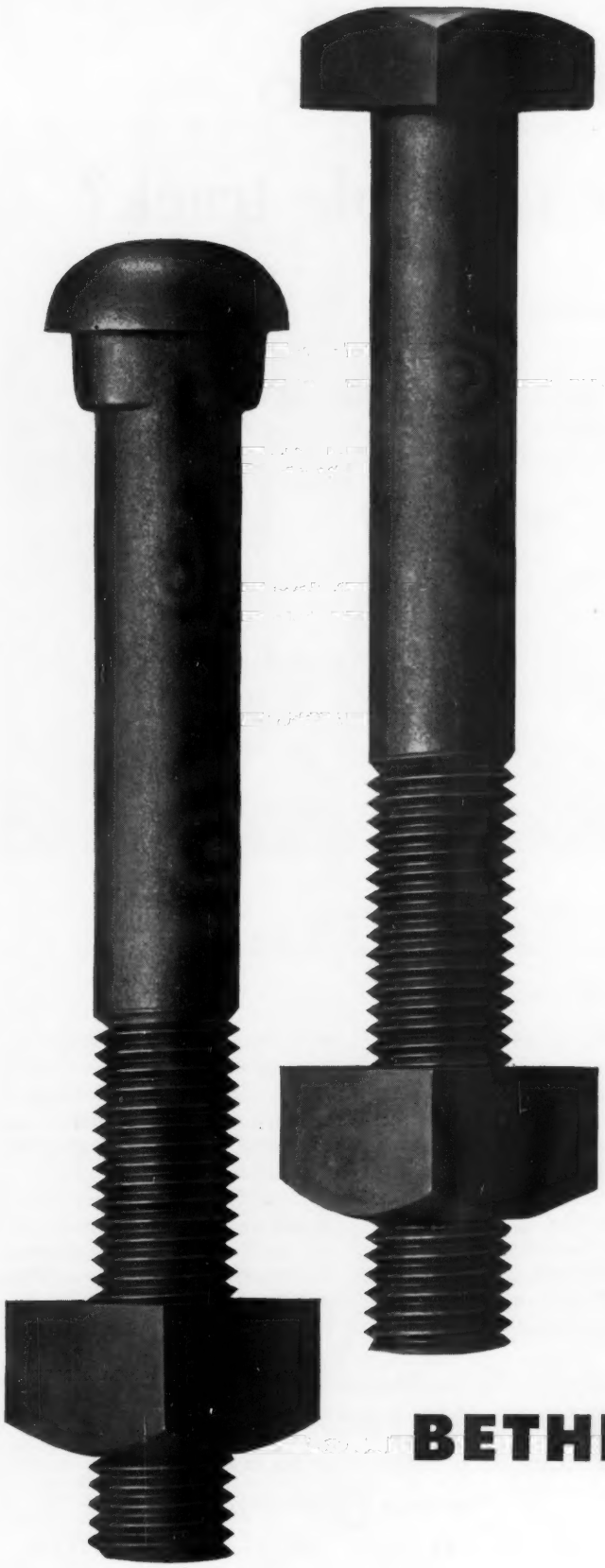

TWO TYPES OF FROG BOLTS

...and each comes in full size range

When you order Bethlehem Frog Bolts, you can choose from two types: square head and button head. What's more, each type is furnished in diameters from $\frac{7}{8}$ in. to $1\frac{3}{8}$ in., and in lengths to meet individual needs. The commonly used sizes of square-head frog bolts are stock items, and are threaded for $4\frac{1}{2}$ in., to American National Coarse Class 2 fit.

Bethlehem Frog Bolts are made from carbon steel, and are heat-treated to meet the requirements of the AREA 1953 Spec., or ASTM Spec. A183-53T. They can be supplied with any type of standard nut.

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BETHLEHEM STEEL

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Why not C.T.C. for multiple track?

In multiple-track territory with UNION C.T.C. and reverse running on all tracks, track maintenance is speeded since repairs on one track can be handled efficiently with little or no interference to movement of trains on the other tracks.

Centralized Traffic Control has proved highly successful on single- and double-track lines, and more and more railroads are applying it to multiple-track operations where it promises even greater benefits.

For example, 3 tracks, all signaled for train operation in either direction and with centralized control of all interlockings, will have a capacity equal to or greater than 4 tracks where point to point interlocking control is used and each pair of tracks is signaled for train operation in one direction only.

You gain the advantage of extremely flexible operation when one track is blocked or out of service due to an emergency or to maintenance work. What's more, you completely eliminate the expense of 2 crossovers at each interlocking as well as the cost of maintaining a fourth track, and can use the rails and track materials in other locations.

Similarly, in 2-track territory, a layout with 2 crossovers at each interlocking, and with reverse running on both tracks, will have a much greater capacity than double-track territory with passing sidings and the tracks signaled for single direction running.

Union Switch & Signal is prepared to help you analyze your traffic control problems through a competent staff of traffic control engineers. Write or call our nearest office for complete information.

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DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY

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November 7, 1955 **Vol. 139, No. 19**

Week at a Glance

The engineers and the railroads have agreed on terms for a wage increase for members of that brotherhood, effective October 1. It's estimated that their pay increase will amount to 14½ cents per hour. 9

"Exploit the advantages" of railroad passenger service, says Monon President Warren Brown. Such advertising might capitalize on the convenience of arrival and departure times, or the equipment or comfort or convenience of specific trains, or the attractions of the places the trains go to. Advertising railroad service merely as a stand-by facility, he says, "accomplishes nothing." 10

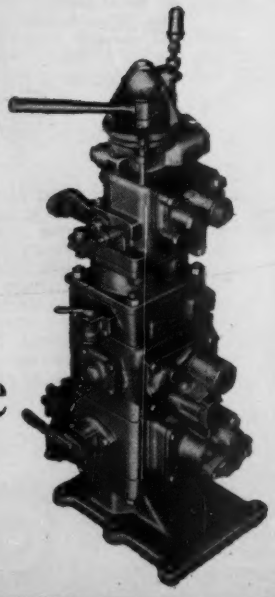
Equipment orders reported in this issue contribute substantially to big business for the car builders and improved capacity to move freight. The New York Central will sign up for 14,750 more freight cars—including 9,750 hoppers—and the N&W for 2,050—of which 1,550 will be hoppers. Also, the N&W is buying another 25 diesels. 13

FORUM: "White paper" on the Weeks Report—that's a fair appraisal of a recent article by Jervis Langdon, Jr., chairman of the Association of Southeastern Railroads. It's a basic background document for the educational effort the railroads and their friends have to exert relentlessly to arouse the public to the importance of the Cabinet Committee's recommendations. 23

CTC for movement both ways on multiple tracks is a highly effective use of this modern equipment in heavy-traffic territories. The Union Pacific has capitalized on its versatility in the Sherman hill section of the road's main line across Wyoming. 24

Waste packing is on the way out, and a significant reduction in hot box frequency is going to result from the new developments in the lubrication of plain journals. The AAR's W. M. Keller recently gave car men a

Here's a brake with an unlimited future



• When a locomotive is equipped with the 24RL brake equipment, its future assignments are unlimited.

No matter *what* class of service the locomotive may enter, the 24RL brake can do the job—without expensive changes in basic piping.

Westinghouse Air Brake
COMPANY
AIR BRAKE DIVISION WILMERDING, PA.

Current Statistics

Operating revenues, eight months	
1955	$6,589,987,829
1954	6,194,297,536
Operating expenses, eight months	
1955	$4,971,230,325
1954	4,939,611,628
Taxes, eight months	
1955	$ 718,704,132
1954	584,152,273
Net railway operating income, eight months	
1955	$ 732,547,087
1954	500,672,194
Net income, estimated, eight months	
1955	$ 582,000,000
1954	349,000,000
Average price railroad stocks	
November 1, 1955	90.92
October 31, 1954	70.64
Carloadings revenue freight	
Forty-two weeks, 1955	30,577,423
Forty-two weeks, 1954	27,445,311
Average daily freight car surplus	
Wk. ended Oct. 29, 1955	2,136
Wk. ended Oct. 30, 1954	30,314
Average daily freight car shortage	
Wk. ended Oct. 29, 1955	22,659
Wk. ended Oct. 30, 1954	3,664
Freight cars on order	
October 1, 1955	52,913
October 1, 1954	11,993
Freight cars delivered	
Nine months, 1955	25,938
Nine months, 1954	30,266

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Week at a Glance CONTINUED

summary of current progress in this field, and it becomes Part I in a *Railway Age* series on Hot Boxes—Causes and Cures. 26

What electrical men are doing for better railroading was brought into focus in the Land Transportation Committee session at the fall meeting of the AIEE. 27

When to renew crossties is one of the railroads' big questions. The Railway Tie Association looked at all sides of that question at its annual meeting a few days ago, and found general agreement that the present renewal rate—equivalent to an average life of 42 years for a tie—is not realistic. 28

Let's settle this per diem business! Such is the essence of a letter from a responsible railroad officer suggesting definite ways to end a controversy that has been dragging on for a long time—with considerable harm, it appears, to the industry's competitive situation. 31

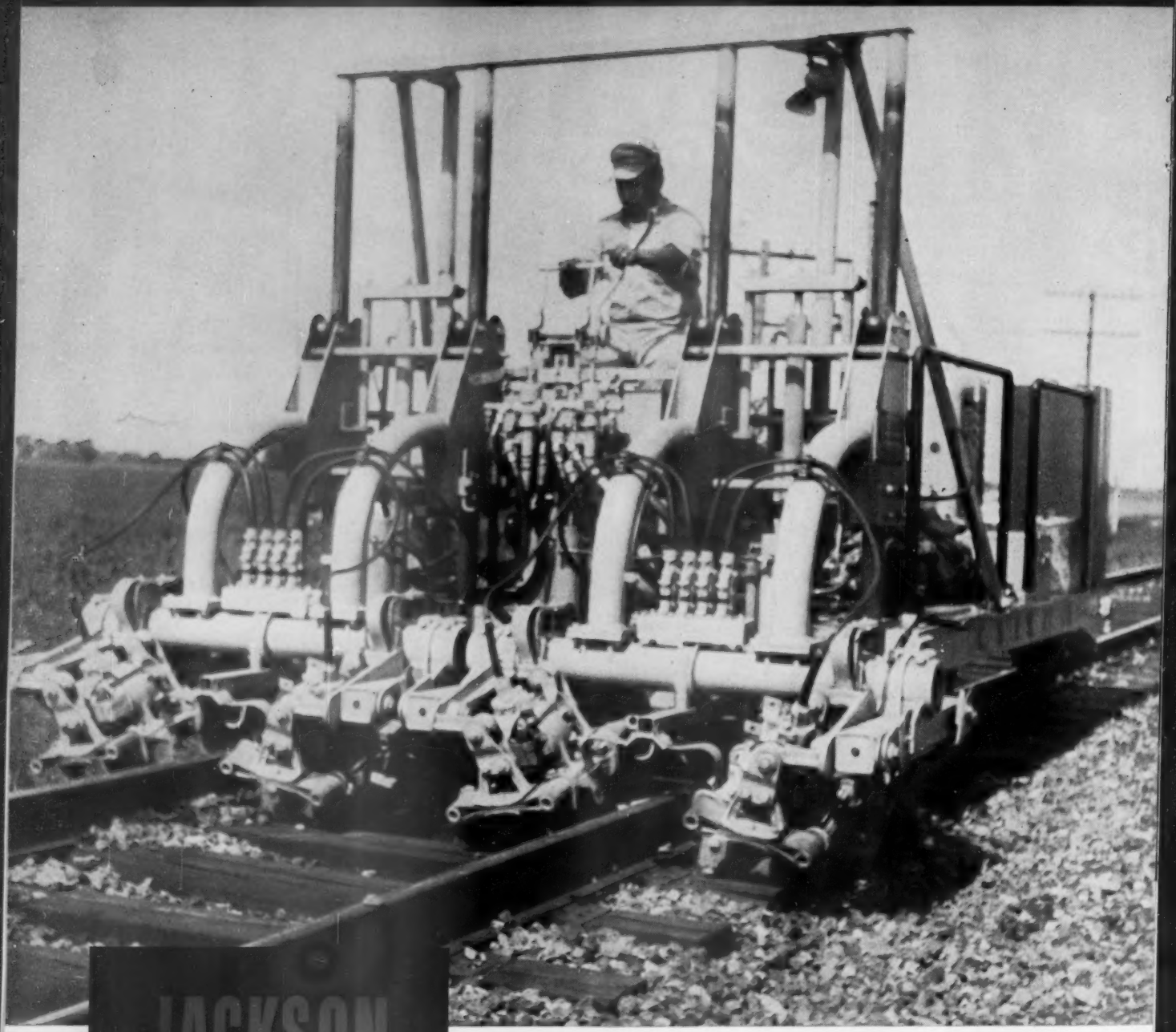
Safety IS first at Barstow, where the Santa Fe's diesel shops turn in consistently favorable safety records. Contributing to this achievement are a regular program to keep employees mindful of safety and a variety of techniques and devices that make locomotive service and maintenance tasks easier as well as less dangerous. 32

COMING—watch for it in next week's issue—a full report of what was said by shippers, railroad men and railway supply manufacturers at the first *Railway Age* roundtable. Subject: What IS the modern freight car?

BRIEFS

"Seven civil engineering wonders of the U.S." have been picked by the ASCE. They are: Chicago's sewage disposal system; the Colorado River aqueduct; the Empire State building; Grand Coulee dam; Hoover dam; Panama canal; and the San Francisco-Oakland Bay Bridge. Only one of the "wonders," the Empire State building, is the product of unadulterated private enter-

Now-more than ever-your best bet for '56!



JACKSON TRACK MAINTAINER

The 1956 model, now in production, combines major improvements to provide even greater speed and efficiency of tamping under all conditions . . . improvements such as: Much greater power . . . a highly practical means of directing every bit of vibration to the ballast . . . and other important features . . . all of which increases the already wide margin of superiority of this machine as the best means of both putting up and maintaining track of finest quality. By all means write, wire or phone for complete information concerning the JACKSON TRACK MAINTAINER. You're sure to agree, we believe, that it is by long odds your best bet for '56.

Acquirement plans to suit your needs.

JACKSON VIBRATORS, INC.
LUDINGTON, MICHIGAN

Week at a Glance CONTINUED

prise — which gives some measure of the degree to which heavy construction is now oriented toward socialism.

Atomic-powered locomotives may become commercially feasible some years hence, but enthusiasm over that prospect seems to be much more evident among the theoretical physicists than among prospective buyers and operators of such equipment. Such at least was the conclusion our observer drew from the round-table conference on Atomic Energy in Industry, held in New York recently under the auspices of the National Industrial Conference Board.

"Not openly," but "by every means at their command," the railroads will oppose an expanded federal aid highway program. So says that expert on railroad plans and motives, Neil J. Curry, chairman of the board of American Trucking Associations. "The railroads," he told a gathering of Florida truckers last week, "will try to convince Congress that the trucking industry should be saddled with a big share of any new taxes." If the bigger federal aid program requires more taxes, says Mr. Curry, they must be excise taxes only, and any increase must be "across the board." The truckers won't stand for any other kind.

"Piggyback" interchange problems, for which a solution is necessary before through T-O-F-C service can be set up between Midwestern cities and points in the Southwest, will be discussed at a meeting this week in St. Louis of representatives of the railroads involved.

A one-man crusade on behalf of the Cabinet Committee Report on transportation is being carried on by David I. Mackie, chairman of the Eastern Railroad Presidents Conference. Last week this effort really hit concert pitch. On November 1 Mr. Mackie spoke to some 500 members of the Baltimore Rotary Club; on November 2 to about a thousand guests at a Cleveland Chamber of Commerce luncheon; and on November 3 to another 500 or so at a joint meeting of the Chambers of Commerce of Allentown, Easton and Bethlehem, Pa. (All of these meetings were set up under joint sponsorship of the local ERPC community relations committees.) Then, on November 4, he was scheduled to talk on the Cabinet Report to an AAR regional legislative meeting at White Sulphur Springs, W. Va. And from now to the end of the year Mr. Mackie has plans to make 12 more major public speeches to carry the industry story to other groups of equal importance.

The ICC paid tribute November 2 to former Commissioner J. Haden Alldredge who retired October 31 after 16½ years as a member of the commission. Mr. Alldredge, whose term had more than three years to run, resigned to enter the private practice of law. At the November 2 special session of the commission he was presented with a scroll signed by all of the members. It gave him "much of the credit" for establishment of the present class-rate structure and uniform classification, which "stand as one of the significant landmarks of transportation regulation."

A wildcat walkout of L&N operating employees at Birmingham, Ala., and Montgomery, a result of a dispute over reclassification of three hostler jobs, recently upset the road's operations in that area for four days. After the railroad secured an injunction the men went back to work.

Illinois Central employees have put in some 415,000 suggestions in the 17 years that road's employee suggestion system has been in effect. And, according to George M. Crowson, assistant to the president, 73,295 of the suggestions were good enough to be adopted. Payments made to employees for usable ideas have totaled almost a million dollars.

"Streamliner" Switch Starts Smoothly

UP Pacific coast trains transferred from C&NW to the Milwaukee; needed roadway changes made in record time

The first joint Milwaukee-Union Pacific-Southern Pacific "streamliners" arrived at and departed from Chicago's Union Station October 30. The smooth shift from the Chicago & North Western to the Milwaukee, east of Omaha, was the result of intensive planning and preparation (*Railway Age*, September 26, page 8, and October 24, page 11).

North Western equipment was switched from the trains and replaced by Milwaukee cars painted traditional UP colors during the week before the shift. The Milwaukee furnished leg-rest coaches, dining cars and "head-end" cars to replace C&NW equipment in the streamliner pool.

The necessary roadway and signal improvements were placed in service by the Milwaukee in record time. Additional track capacity and flexibility on the 37-mile line between Elgin and Chicago are the result of two major improvement projects.

One was installation of a traffic control system for authorizing train movements by signal indication both ways on each of both main tracks (like two single-track railroads side by side), on the previous double track between Franklin Park and Elgin, 25 miles.

With this system, both tracks can be used inbound during the eastward peak in the morning, or outbound in the westward peak in the evening. Power crossovers are arranged so that faster trains can be diverted to use idle sections of the other track, to run around slower trains going in the same direction. In addition to existing crossovers in interlockings, the project calls for five new power crossovers at Franklin Park, one at Bensenville, and two at Roselle, as well as one crossover and a power switch at Spaulding. With this new traffic control system, train movements both ways on both tracks are authorized by signal indications without necessity for train orders.

The second major improvement to increase capacity on this line was installation of new 132-lb rail on a former freight track, thereby adding a third main between Western avenue, Chicago, and Franklin Park, about 10 miles. This track is signaled both ways between Western avenue and Pacific Junction, about 3 miles. Between Pacific Junction and Franklin Park, 7 miles, the third track is signaled westward only.

Planning for these new traffic control projects was started September 13, and construction began September 26. The section from Western avenue to Franklin Park was finishhed in 30 days, and the remainder to Elgin will be in service before December 1.

Centralized traffic control will be installed on 196 miles of line between Marion, Iowa, and Manilla, as soon as materials can be secured. A Milwaukee spokesman said, "installation of cab signals is being planned next year on the Omaha line."

ICC Refused to Halt Streamliner Switch

In an October 27 order, the Interstate Commerce Commission refused to take emergency action under the Interstate Commerce Act's section 15(4) to halt the October 30 switchover of streamliners to the Milwaukee from the Chicago & North Western.

The action had been sought in petitions filed by the Railroad Labor Executives' Association (*Railway Age*, October 31, page 10). Meanwhile, the commission assigned the case, which also involves RLEA pleas under other sections of the act, to its Division 4 for administrative handling. The case in No. 31876.

Trucking Unit Expanded To Push Katy Piggyback

Reorganization and expansion of the activities of the Missouri, Kansas & Texas Transportation Company, wholly owned subsidiary of the Missouri-Kansas-Texas, became effective November 1, D. V. Fraser, Katy president, said.

"Our rapidly growing piggyback operation and its close relationship with pick-up-and-delivery and supplemental highway truck service has indicated a need to integrate all truck and related

FIRST PASSENGERS for the "Challenger-Midwest Hiawatha" inaugural run over the Milwaukee receiving corsages before boarding at Chicago's Union Station (left). Two models, hired by the Milwaukee, pinned yellow carnations on all travelers for the first run. "Highball" for the train's first run from Union Station (right). Milwaukee president John P. Kiley witnesses departure of the first streamliner to Omaha over the Milwaukee's line.

operations under a single responsibility," Mr. Fraser said. "The new organization will continue to supervise our expanding piggyback operations, and will aggressively develop an effective LCL sales program and highway and trailer auxiliary service.

Railway Express Extends Its Fast "SPED" Service

The Railway Express Agency's expedited courier-type express service between railroad depots was extended November 1 from New York to Boston and inaugurated between Chicago and nine other midwestern cities.

"SPED," as the service is called, was first put into operation last June 1 between New York and Washington, D. C. (*Railway Age*, May 30, page 5, and June 6, page 8). Under the plan, station-to-station shipments are marked with a specital bright red label and rushed to destination throughout the day on fast trains. Shipments for specific trains are received up to 30 minutes before train departure.

The November 1 extension made the service available between New York, Bridgeport, Conn., New Haven, Providence, R. I., and Boston. At the same time "SPED" began between Chicago; Milwaukee; St. Paul; Minneapolis; Decatur, Ill., Springfield and Quincy; Fort Madison, Iowa; Kansas City; and St. Louis.

RAIL-TESTING MACHINES in the research facilities of the University of Illinois being examined by members of the American Railway Engineering Association's committee on cooperative relations with universities. Left to right are William L. Everitt, dean of the university's college of engineering; Prof. Ralph E. Cramer of the engineering college; R. J. Stone, vice-president — operations, St. Louis-San Francisco, and chairman of the committee; Neal D. Howard, AREA executive secretary; and C. G. Grove, chief engineer, Western region, Pennsylvania.

Labor & Wages

BLE Gets 7% Wage Hike Retroactive to October 1

Railroad representatives and the Brotherhood of Locomotive Engineers have agreed on varying wage increases for road and yard engineers.

The agreement, reached in Chicago October 28, calls for a general wage increase of 5% in the average basic daily rate of engineers, and an additional 2% increase to adjust for differential "inequities" between engineers and other railroad employees. Both wage increases represent an estimated 14½-cents-an-hour boost and are retroactive to October 1.

Part of the increase was granted in lieu of a carrier-financed health and welfare plan. Should the BLE move for a railroad-financed health and welfare plan on individual carriers, the agreement provides that up to 4 cents an hour will be credited to railroads for payment of the benefits.

A 5-day week for yard engineers is provided for in the agreement, if it is requested on all railroads.

A moratorium clause was agreed upon covering changes in rules involving payment of arbitraries.

Agreement between carriers and the union was reached without intervention of government mediators or boards.

Automation Unemployment On AAR Meeting Program

The subject of employment opportunities for railroad men who are displaced as a result of increased mechanization will be discussed at the annual meeting of member roads of the Association of American Railroads, which will be held in Chicago this month.

This was announced by AAR President William T. Faricy who also said the subject has been under consideration between railroad management and labor organizations representing railroad employees. Mr. Faricy's statement was made after W. P. Kennedy, president of the Brotherhood of Railroad Trainmen, had made a statement on "Automation in the Transportation Industry" before a congressional subcommittee.

The Kennedy statement did not oppose, technological progress in the railroad industry, but the BRT president did call for protection of all affected employees, young and old. "The working man is not convinced that all in management wish to see the fruits of progress equitably shared," the BRT president said.

His presentation included a table comparing selected statistics of the 1926-1930 period with 1954 figures. These data showed that the railroads in 1954 operated with 599,191 fewer employees than they had 25 years before, but that revenue ton-miles were up by 122 billion and gross revenues were $3 1/3 billion higher. Mr. Kennedy also had other figures on the basis of which he estimated that technological developments between 1947 and 1954 had reduced by 200,000 the number of full-time, 40-hour-week jobs available on the railroads.

The subcommittee before which Mr. Kennedy made his presentation is the Subcommittee on Economic Stabilization of the Congressional Joint Committee on the Economic Report. Another recent witness before the subcommittee was S. R. Hursh, chief engineer of the Pennsylvania whose statement, describing that road's new Conway yard, was designed to show the implication and significance of automation in major switching yards.

Emergency Board Reports in PRR Case

The White House has made public the report of an emergency board which President Eisenhower appointed to investigate a dispute between the Pennsylvania and those of its shopmen represented by the Transport Workers' Union of America, C.I.O. There are 22,560 PRR shopmen involved.

The issues arose out of demands for paid holidays, a health and welfare program, and a graded classification for work to be performed on diesel locomotives by boilermakers. On the latter issue the Board recommended negotiation of a rule by which, in general, work on sheet metal of 13 gauge and heavier be done by boilermakers, and on metal of less than 13 gauge by sheet metal workers, with provisos, the most important of which is that it shall not conflict with other union agreements.

Recommendations for holidays and

health and welfare are in line with the program now in effect for non-operating employees on practically all Class 1 roads, including some on the PRR. It suggests pay for each of seven designated holidays whenever one falls upon an employee's work day. It also suggests payment of $3.40 per month by the carrier and an equal amount by each employee, the sum to be used for a health and welfare program for employees only.

The board consisted of Howard A. Johnson, chairman, formerly chief justice of the Supreme Court of Montana; Walter R. Johnson, formerly attorney general of Nebraska; and Mart. J. O'Malley, formerly chief justice of the Supreme Court of Indiana.

People in the News

Hersh Named to BLE Public Relations Post

Eugene Hersh, former Ohio newspaperman and wire service reporter, has been named director of public relations for the Brotherhood of Locomotive Engineers, effective November 15. He succeeds Arthur Shenefelt, whose appointment as director of press relations for the New York Central is reported elsewhere in this issue.

Warren Brown Assails Railroad Advertising

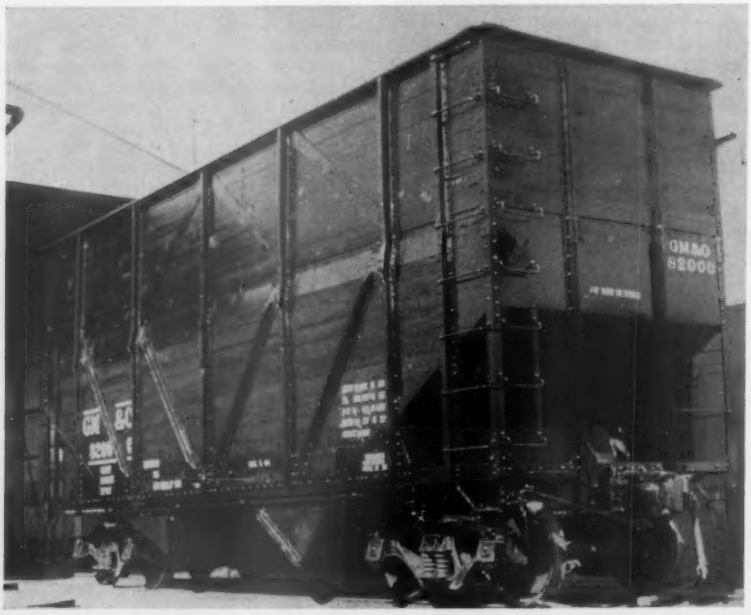
Does advertising which places emphasis on dependability of passenger trains in all kinds of weather accomplish anything? Warren W. Brown, Monon president, recently told the Chicago Passenger Club that type of advertising accomplishes nothing except to emphasize that "railroads are just a stand-by passenger service".

"Large scale advertising campaigns need to be looked at with a cold eye," he stated. "Passenger advertising should concentrate on exploiting advantages of specific trains, or it should deal with the convenience of departure and arrival times, or else it can deal with the attractions of a resort or a city. In any case, I believe advertising should be avoided which merely tells the traveler that you are in the passenger business."

There are three major problems in the railroad passenger industry, Mr. Brown declared. The first involves the scope and location of competition. Too much concentration on air line competition is being made when "the automobile is our chief difficulty".

The second problem is railroad managements' wish to compete. Mr. Brown is not sure the railroad industry has made up its mind whether or not it wants to compete for passenger traffic. A third problem is how to compete for passenger business. He states, "I am convinced we do not know how to compete with the private automobile."

Mr. Brown's ideas for improving railroad passenger service include: A basic 2-cents-a-mile fare with an accommodation charge only for Pullman travel; use of new low-slung, lightweight trains; and establishment of a passenger research fund by contributions from each railroad.



CREATING NEW TRAFFIC on the Gulf, Mobile & Ohio, wood chip cars such as this are serving a large hardboard plant of the Masonite corporation at Laurel, Miss. The plant uses chips made from wood waste at lumber and veneer mills in Mississippi and Alabama. Present traffic into the plant averages 20 to 30 cars a week, with a potential of 150 cars weekly in 1956. The chip car design, worked out jointly between the shipper and carrier, features 15½-ft sides and has a capacity of about 3,436 cu. ft.

Law & Regulation

ICC Speeds Publication Of Carrier Statistics

The Interstate Commerce Commission has published the first installment of "Transport Statistics in the United States", replacing the "Annual Report of Statistics of Railways in the United States", popularly known in transportation circles as the Blue Book.

This information is being released to the public three years in advance of past issues. Two other publications which dealt with railways, "Summary Tables of the Statistics of Railways in the United States", and "Preliminary Abstract of Railway Statistics" will be discontinued.

The new publication also will include other annual reports previously issued by the commission dealing with operations and finances of other carrier groups subject to ICC regulation. These include "Selected Financial and Operating Statistics From Annual Reports of Electric Railways", "Selected Financial and Operating Statistics From Annual Reports of Freight Forwarders", "Statistics of Class I Motor Carriers", "Statistics of Oil Pipe Line Companies Reporting to the Interstate Commerce Commission", "Selected Statistics From Annual Reports of Private Car Owners", and "Selected Financial and Operating Statistics From Annual Reports of Carriers by Inland and Coastal Waterways and Maritime Carriers".

The new plan of publication, initiated by E. R. Jelsma, director, Bureau of Transport Economics and Statistics, calls for the arrangement and release of carrier information in several distinct parts, each one dealing with a single carrier group. The parts will be uniform in style and format, and will be punched for assembly in standard binders thus permitting users to assemble only those parts of the report in which they have an interest.

"Transport Statistics" constitutes the 68th annual publication of carrier information by the commission since its establishment in 1887. When all parts are issued, it will provide substantially all the information previously published separately in the Blue Book and the other annual reports.

The present release pertains to Part 1 of the Interstate Commerce Act

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- **LOW CONDUCTIVITY.** Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity – .25 btu per square foot, per hour, per degree F., per inch thick.
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- **HIGH SALVAGE VALUE.** The all-hair content does not deteriorate with age; therefore has high salvage value. No other type of insulation offers a comparable saving.

Shipments of valuable perishables are at the mercy of extreme temperature changes unless properly protected. Only an efficient refrigerator car insulation can reduce this hazard.

Leading refrigerator car builders recognize this. That is why, for the better part of a century, they have been specifying all-hair insulation. They know that STREAMLITE HAIRINSUL is the one insulation that is fully efficient under all weather conditions – hot or cold – no matter how severe.

Other reasons why car builders specify STREAMLITE –there are more. Write for complete data.

MERCHANDISE MART, CHICAGO 54

SETS THE STANDARD BY WHICH ALL OTHER REFRIGERATOR CAR INSULATIONS ARE JUDGED

and comprises 293 pages of railway statistics relating to the year ended December 31, 1954, containing more than 50 per cent of the data previously published in the Blue Book. It includes the abstract of statistics by district and region (formerly Table 158), summaries by class of service, district and region of railway operating income, operating revenue, and operating expenses and the abstract of reports of all Class I steam railways.

Traffic

ICC Mobilization Chief Outlines Plan for Ports

Details of a plan for wartime control of ocean ports were explained to the American Association of Port Authorities at Houston, Texas, November 1, by Francis A. Silver, chief of mobilization planning, Interstate Commerce Commission.

Mr. Silver said the plan, based partially on experience of the Korean conflict and World War II, was prepared by the Interagency Committee on Port Utilization and is incorporated in the plan for a War Transport Administration.

It calls for direction by a Port Controller, Mr. Silver said, who will coordinate movements of traffic via port areas in cooperation with the Defense Department's surface transport and storage office. With a view to "maximum decentralization of operating authority to regional and local port levels," Mr. Silver said, Port Control Directors will be responsible for efficient port operation. Part of this responsibility, he said, will be to prevent congestion of ships and cargo in port.

Competitive Transport

Highway Research Board Issues "WASHO" Report

Findings made as a result of the "WASHO" road tests have been issued by the Highway Research Board of the National Academy of Sciences. They are included in Part 2 of the board's report on the tests.

Although there was a large group of other cooperating agencies, the "WASHO" tests were so-called because they were conceived and sponsored by the Western Association of State Highway Officials. They were conducted on a test section of highway constructed near Malad, Utah. They involved 238,000 applications of four test loads, with axle weights of 18,000 and 22,400 lb. for single-axle units, and 32,000 and 40,000 lb. for tandem-axle units. The report is a 212-page document and the findings included these:

IRON HORSE MEMORIAL was dedicated in Coonskin Park, Charleston, W.Va., during a recent three-day festival commemorating the railroads' contribution to the city's growth. Here, M. I. Dunn, vice-president, construction and maintenance, Chesapeake & Ohio (left), and William C. Marland, governor of West Virginia, "engineer" the Kanawha-type K-4 locomotive to its final resting place. C&O contributed the locomotive which was brought to the site over Virginian, New York Central and Baltimore & Ohio tracks.

On the basis of engineering analysis, the minimum thicknesses of pavement structure with 2-inch surfacing of asphaltic concrete that would have been adequate to carry the 238,000 applications for the four test loads were 16, 19, 17, and 20 inches in the outer wheel path. In the inner-wheel path, the 14-inch-thick pavement sections were undamaged by any of the four loads. Comparable values for the 4-inch asphaltic-concrete pavement, outer wheel path, were 10 inches for the first three loads and 14 inches for the 40,000-lb. tandem-axle load. For the inner-wheel path, they were 6 inches for the single- and 10 inches for the tandem-axle loads.

Development of structural stresses in the pavement sections was confined largely to two critical periods of traffic operation. The most severe critical period in terms of rate of development of pavement distress started when test traffic was resumed for the summer and adverse subsurface conditions associated with spring thaw were still present. The second critical period was from mid-February through the first week in April.

Based on distress that occurred in the section with 4-inch surfacing, a tandem-axle load of 28,000 lb. would have been equivalent in this test to a single-axle load of 18,000 lb. Comparisons for sections with 2-inch surfacing showed that a tandem-axle load of 28,300 lb. in this test could have been equivalent to the single-axle load of 18,000 lb. In general, the distress caused by tandem axles was equivalent to that caused by single axles of the order of two-thirds of their weight.

For this project, the total area of all types of distress (from Class 1 cracks to deep patches) was 13.8% greater under the 22,400 lb. single-axle load than under the 18,000 lb. single axle load and 48% greater under the 40,000 lb. tandem load than under the 32,000 lb. tandem axle load.

Figures of the Week

Freight Car Loadings

Loadings of revenue freight in the week ended October 29 totaled 835,396 cars, the Association of American Railroads announced on November 3. This was an increase of 897 cars, or 0.1%, compared with the previous week; an increase of 99,163 cars, or 13.5%, compared with the corresponding week last year; and an increase of 54,553 cars, or 7.0%, compared with the equivalent 1953 week.

Loadings of revenue freight for the week ended October 22 totaled 834,499 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, October 22

District	1955	1954	1953
Eastern	131,096	116,366	134,178
Allegheny	155,998	126,561	156,571
Pocahontas	62,211	54,262	56,533
Southern	136,208	129,423	127,387
Northwestern	141,016	117,256	131,880
Central Western	144,238	141,909	132,853
Southwestern	63,732	60,168	65,011
Total Western Districts	348,986	319,333	329,744
Total All Roads	834,499	745,945	804,413
Commodities:			
Grain and grain products	58,475	55,646	58,042
Livestock	15,369	16,594	14,802
Coal	136,387	132,098	130,987
Coke	13,428	8,700	12,502
Forest Products	46,589	46,465	45,199
Ore	81,490	52,054	76,505
Merchandise l.c.l.	65,093	64,398	72,026
Miscellaneous	417,668	369,990	394,350
October 22	834,499	745,945	804,413
October 15	827,245	721,336	822,582
October 8	807,035	702,910	804,066
October 1	820,312	721,643	812,534
September 24	819,025	710,215	819,709
Cumulative total, 42 weeks	30,577,423	27,445,311	31,747,068

In Canada.—Carloadings for the seven-day period ended October 14 totaled 84,482 cars, compared with 92,730 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 14, 1955	84,482	32,636
October 14, 1954	71,403	25,898
Cumulative Totals:		
October 14, 1955	3,189,372	1,280,949
October 14, 1954	2,870,822	1,118,132

Rates & Fares

NY Chamber Urges End to Discriminatory Rail Rates

The New York State Chamber of Commerce recently urged equalization of all railroad freight rates on cargoes

to and from eastern seaboard points north of Cape Hatteras. The chamber urged the city of New York to join in action to bring the matter before the Interstate Commerce Commission and the federal courts.

It was estimated by the chamber that the port of New York has lost over $1 billion in import-export tonnage during the past four years, largely because of "discriminatory rates" which favor Baltimore and Philadelphia.

Equipment & Supplies

N&W to Buy 2,050 Freight Cars and 25 Diesels

Norfolk and Western directors have authorized purchase of 2,050 freight cars and 25 general purpose diesel locomotive units costing approximately $20,000,000.

The road's Roanoke, Va., shops will build 1,500 70-ton hopper cars, and Pullman-Standard will build 500 box cars (450 40-ft single-door cars and 50 50-ft double-door cars), and 50 70-ton covered hopper cars. Work on the hopper cars will begin next June, about the same time construction of the road's new Roanoke shops freight car shop is completed (*Railway Age*, July 18, page 10).

The diesels, all of 1,600 hp or its equivalent, will be used in freight service on the Cincinnati district between Portsmouth, Ohio, and Cincinnati, including Clare and Berry yards. They will permit transfer of heavy locomotives to other parts of the system. Delivery is expected about mid-1956.

FREIGHT CARS

Pakistan Inquiring For Freight Cars

The Joint Director of Procurement and Development, Railway Division, Ministry of Communication, in Karachi, Pakistan has requested bids for supply of 70 broad-gage (5½ ft) low-side open freight cars, and 161 broad-gage high-side open cars, according to Foreign Commerce Weekly. A copy of the bidding documents may be borrowed from the Commercial Intelligence Division, Bureau of Foreign Commerce, Washington 25, D.C.

NYC to Order 14,750 Cars At a Cost of $118 Million

The New York Central will order 14,750 freight cars, for earliest possible delivery, at a cost of $117,855,000, Alfred E. Perlman NYC president, has announced.

Included will be 5,000 box cars, 9,250 70-ton self-clearing hopper cars and 500 70-ton covered hopper cars. The number of hopper cars to be ordered is greater than the entire railroad industry combined has ordered in any of the last three years.

Mr. Perlman pointed out that the NYC, recognizing the car shortage all over the country, is placing orders in excess of the road's quota in the national car program goal set earlier this year by the Association of American Railroads (*Railway Age*, July 4, page 7).

The **Northern Pacific** will build 1,000 double-door 50½-ft box cars and 200 70-ton ore cars in its Brainerd, Minn., shops next year, at a cost of $9,500,000. NP President Robert S. Macfarlane announced work will begin as soon after the first of the year as delivery of steel and other materials can be obtained.
End

The **St. Louis Southwestern** has ordered 700 50-ton box cars from Pullman-Standard at a cost of $5,500,000. Half the cars will be 50-ft long with 15-ft double doors, and half will be 40-ft long with 8-ft single doors. All the cars will be provided with nailable steel flooring in the doorways. Delivery is scheduled for the second quarter of 1956.

The **Virginian** is placing orders for materials for 500 70-ton steel hopper cars to be built in its Princeton, W. Va., shops beginning the second half of 1956.

PASSENGER CARS

The **New York City Transit Authority** has announced plans to ask the city's Board of Estimate for $51,000,000 to buy 500 new subway cars.

SPECIAL

The **Western Maryland** has ordered two trailers with sliding roofs from the Strick Company for TOFC service.

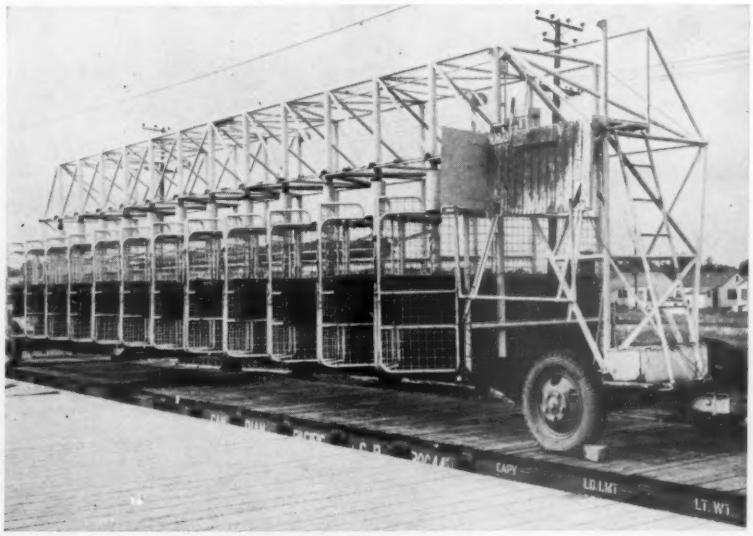
Supply Trade

G. C. Jordan and **G. M. Seymour**, previously with **Gustin-Bacon Manufacturing Company** as manager distributor sales and manager railroad sales, respectively, have joined the **George T. Cook Company,** Kansas City, as members of the firm.

United States Gasket Company, Camden, N.J., and **Belmont Packing & Rubber Company,** Philadelphia, have consolidated their product lines, sales organizations and activities under the merchandising name of **U. S. Gasket-Belmont Packing. Harry Stott,** who headed sales for United States Gasket Company, is general sales manager of the new combination.

Holton E. Fox, who has been field engineer, **SKF Industries,** in the

(*Continued on page 33*)



CANADIAN PACIFIC BOAST that it can transport anything was tested recently, and successfully, when the 12-horse starting gate at Polo Park, Winnipeg, was loaded on two platforms for shipment to Edmonton. The gate, 53 ft long and with its gates extending six inches over the edge of the platforms on the flat cars, is shown before its wheels were removed and it was specially secured for the 848-mi run.

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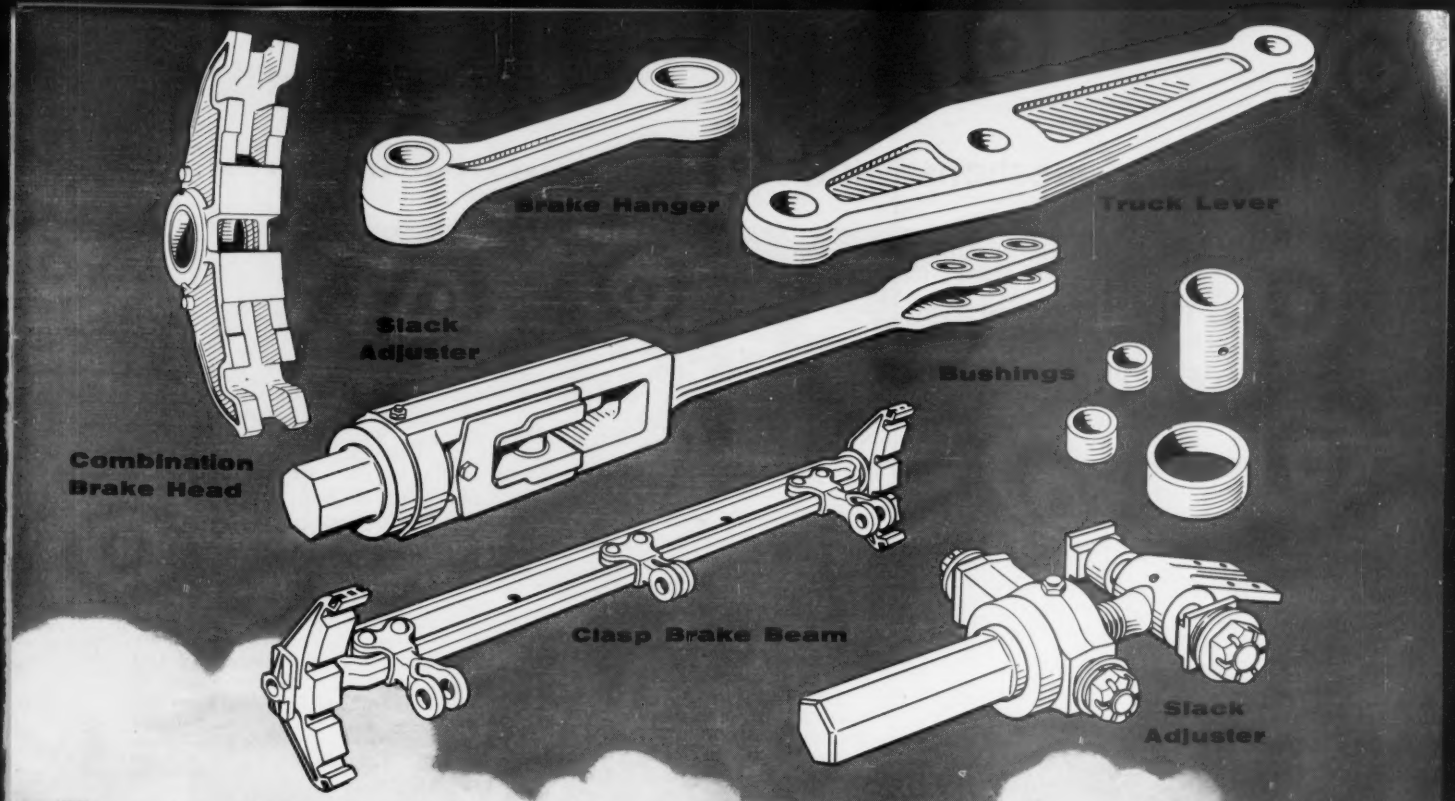

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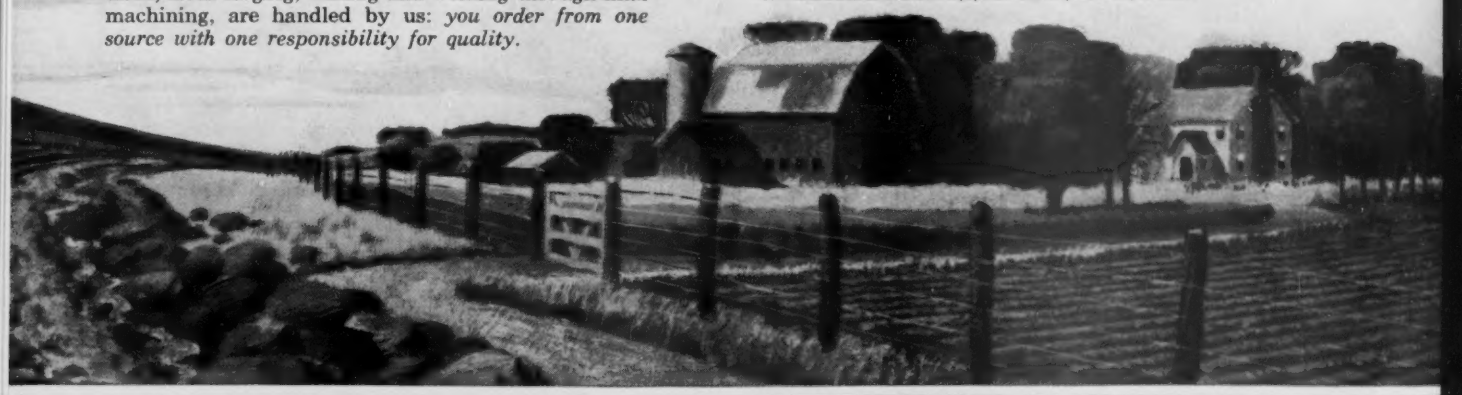

Questions and Answers FOR THE TRANSPORTATION DEPARTMENT

Over the years, have the railroads reduced the out-of-service time of cars bad-ordered for light repairs?

Yes — and No.

The late L. F. Loree, president of the Delaware & Hudson, found that on his railroad such cars were out of service an average of 56-60 hr, which included an average of 20-21 hr on repair tracks unworked or awaiting material. We asked a number of railroad people whether or not this out-of-service time had since been reduced.

•

J. P. Newell, vice-president, Pennsylvania, writes:

"Our best estimate is that the average out-of-service time for loaded freight cars is approximately 16 hr, foreign empty cars 24, and system empties 36 hr. One of the reasons for this improvement is that on the Pennsylvania we have instituted a series of records for all loads and foreign empties so that the car foreman, trainmaster and yardmaster in the territory involved have a daily record of these cars and coordinate their activities to keep the cars moving. In addition, we have established forces on Saturday and Sunday in order that these cars do not lay over the weekend. Our system empties take a little longer time as preference naturally is given to loads and foreign empties.

"We anticipate that [with our new organizational set-up] handling of bad order cars will be improved as we are strengthening the car department by the appointment of a supervisor of freight car repairs at system level, and a supervisor of car repairs at each of the nine regions. Since these territories are smaller than the existing regions today, more detailed coverage will be possible. In addition to this, reassignment of duties of handling personnel matters will provide master mechanics with additional time that will be spent on the ground in active supervision of their shops."

•

H. C. Munson, vice-president and general manager, Western Pacific, writes:

"The length of time a freight car is out of service when light-bad-ordered varies with the demand for that particular type of equipment. When the cars are in demand, they usually are released the same day that they are placed on repair track. Few such cars are detained more than 20 hr from the time they are carded in the yard until returned to the transportation yard. If that requires Saturady or Sunday work, it is dealt with accordingly. Other cars which may not be in immediate demand are given second preference but on such cars from the time carder in the transportation yard until returned few will be detained more than 36 hr."

•

"There is no doubt that the lag in making repairs on many railroads is causing a great part of the car shortage in the railroad field," says *J. E. McLeod, chief mechanical officer, Chesapeake & Ohio.* "The basic reason for such a shortage, in my opinion, is that there are too many heavy bad order cars in railroad ownership. This is, in effect, *deferred* heavy maintenance. The probable reason why some railroads have cars for a long time on light repair tracks is that they are attempting to fix up temporarily cars which should not be continued in operation without receiving heavy repairs. In other words, any railroad which has not kept up its heavy repairs on freight train cars is going to have difficulty returning cars on its light repair tracks to service not because of the amount of normal light repair work on the light repair tracks but because of the proportion of heavy jobs needed to make cars suitable for further service. These heavy jobs would not exist if the owner's car fleet were kept in reasonably good condition as to heavy repairs.

"Because it has been the policy of the C&O for a number of years to keep its entire fleet of freight train cars in good condition insofar as heavy repairs are concerned (in other words, to have no deferred maintenance), we do not encounter the type of difficulty suggested by Mr. Loree's remarks. Ordinarily, a car repair track on the C&O cleans up its light repair work every working day, Monday through Friday. This means, in effect, that the average car bad-ordered is being removed from repair tracks and returned to service within 20 hr of the time it has been bad-ordered.

"The policy of C&O is to work sufficient forces Saturdays and Sundays to see that all loaded cars are repaired and forwarded as they are during the regular five-day work week.

"We also have a policy in connection with empty cars. Knowing what our day by day need is for empty cars, we work Saturdays and Sundays to meet any demands which may be required to be met. In other words, if we are short on box cars for Monday, Tuesday and Wednesday loading, we would work the accumulations in any yard where cars needed for this service are bad-ordered.

"Our handling in case of open top or coal cars is that if there is no shortage in the early part of the week, we would not work such cars on Saturdays and Sundays, though we would expect to get caught up on them by the middle of the week."

CONDUCTED By G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads, this column runs in alternate weekly issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, *Railway Age,* 30 Church Street, New York 7.

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Boosting job production everywhere

13 TD-24's for Nello Teer—Most of the tractor work on their 4.98-mile, 3,065,000-yd. $4,306,000 section of the Massachusetts Turnpike is being done by these 161 dhp crawlers. Four with scrapers combine to average 327 twenty-yard loads daily on 1500 ft one-way hauls. Others tow rippers, push-load scrapers, or clean up around Teer's two 2½ and 4-yd shovels and 10 haulers.

"1/3 more overburden daily than competitive crawlers" . . . that's the report from Merkli Brothers Coal Company, Beaver, West Virginia, on their International TD-24. Unit is stripping 40 feet of sandstone and shale to uncover a 12 to 51-inch coal seam. "It has better balance and visibility than other tractors," says Partner Henry L. Merkli. "It costs less to maintain; takes less time to grease, too."

Crushes gypsum—Near Avenal, Calif., Superior Gypsum Company's International-powered crusher produces 300 tons of gypsum per 8-hr. day. Material is used to neutralize high-alkali irrigation water.

1 more trip hourly—Fast loading and acceleration help 18½-yd. Payscraper make one more trip hourly than other self-propelled scrapers used by W. E. O'Neill Construction Company, Gary, on their 2½-mile, 700,000-yard Indiana Turnpike section near Gary. Cycle length averages 2½ miles; material is mostly sand.

80 ft ditch in 3 hours—Excavating for water main in Henderson, Texas, International "300" wheel tractor dug 100 cu yds of clay hourly. Backfilling was handled by rig's front-end loader. Ditch is 4 ft deep, 22 in. wide.

"We saved 100 man-hours by lifting zonolite roofing slabs with our International-Drott TD-6," reports M. G. Aldrich, Macon, Georgia, on the 13,000 sq ft building job shown. Lifts of 1 ton were made to 10 ft eave height.

Rugged in rugged rock—"TD-6 is ideal for opening underground mines," says Malcolm McDonald of Kiabob Uranium Corp, Green River, Utah, "It gets around fast in narrow tunnels, yet brings out big loads."

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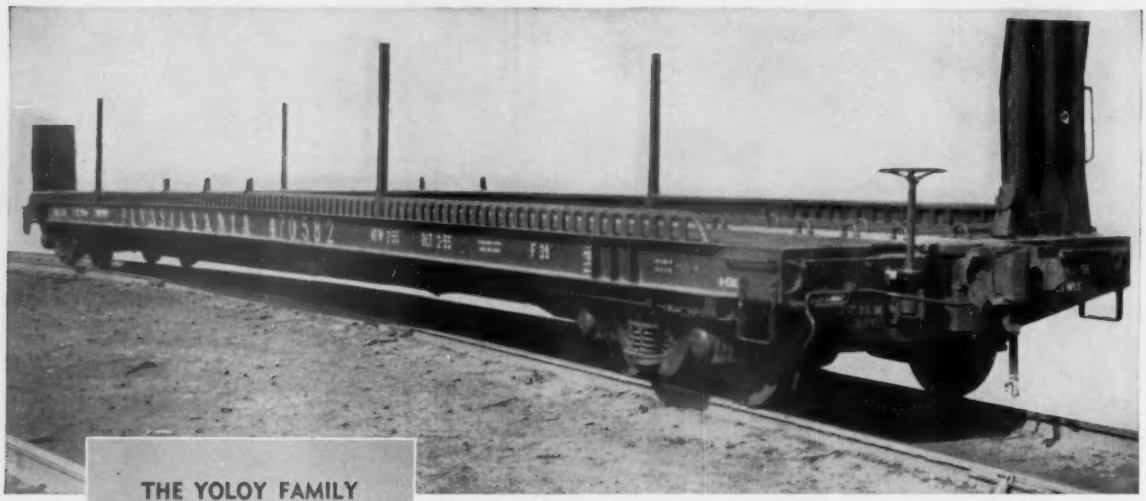

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YOLOY E
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High Strength Low Alloy Steel

These extra long specially equipped flat cars are the Pennsylvania Railroads new Truc-Train cars designed to haul two fully loaded highway trailers. To reduce dead weight, The Pennsylvania used Yoloy E steel to withstand the heavy concentrations of loads encountered in the long spans between truck center plates.

Yoloy E, The Youngstown Sheet and Tube Company's high strength low alloy steel is made to order for problems such as this. It has a high strength to weight ratio for stronger construction without increasing weight. It is easy to weld and fabricate. Yoloy E will also last many times longer than ordinary steel in atmospheric corrosion and is high in resistance to abrasion and wear.

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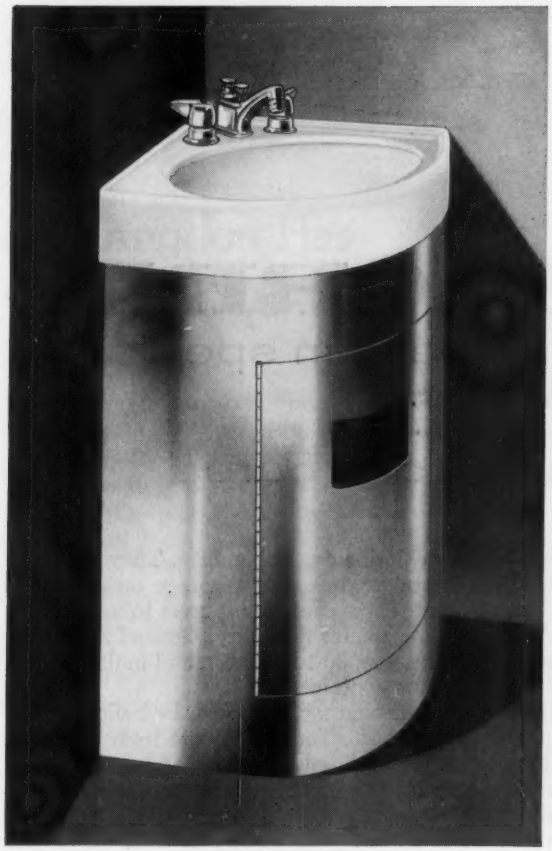

Corner Lavatory

Angle Recess Lavatory

New CRANE lavatories offer builders more flexibility in car designing

Here are two new Crane lavatory designs which can give you greater latitude in laying out plumbing for roomettes and bedrooms—for new sleeping cars—or for modernizing older ones.

Crane Corner Lavatory Designed primarily for roomettes, but can be used elsewhere. Made of the finest Crane quality vitreous china. Chrome-plated combination supply and waste fittings. Integral ice water faucet—for use with circulating ice water system. Valves are self-closing—conserve water. Size, 15″x15″. Cabinet not furnished by Crane.

Crane Angle Recess Lavatory For installation in compactly designed bedrooms. Can be used in other places. Chrome-plated combination supply and waste fittings, and integral ice water faucet. Self-closing valves prevent waste of water. Size, 24″x14″x14″x10″. Cabinet not furnished by Crane.

Ask your Crane Representative for complete information about these lavatories—and about Crane's line of special plumbing, valves and fittings for railroads. Or write Crane Co., General Offices, 836 S. Michigan Ave., Chicago 5, Ill.

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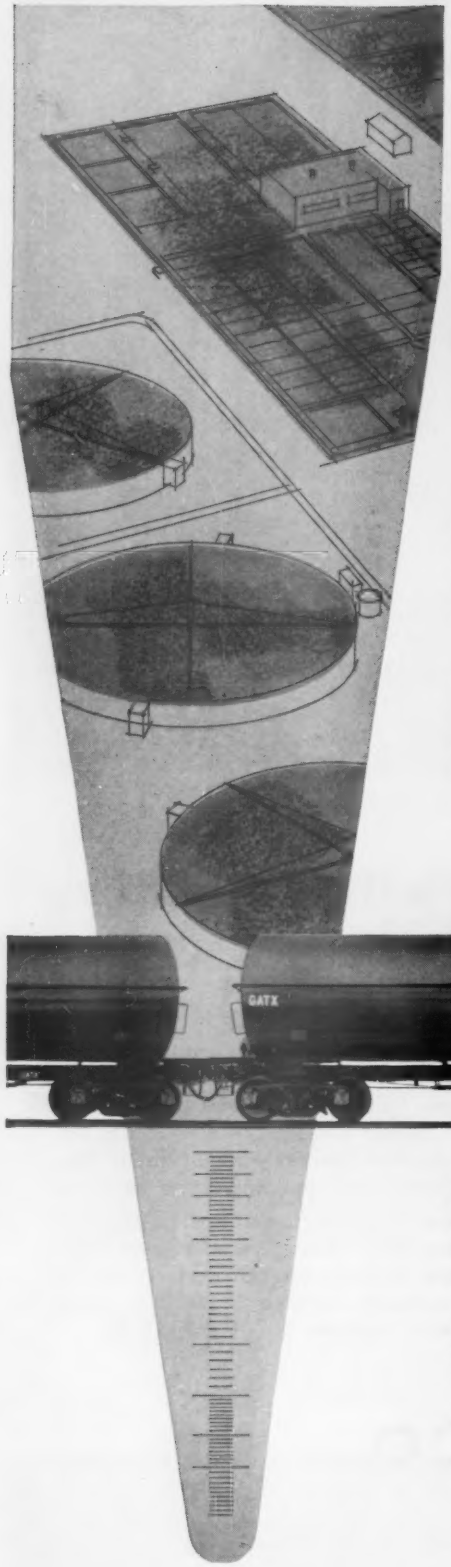

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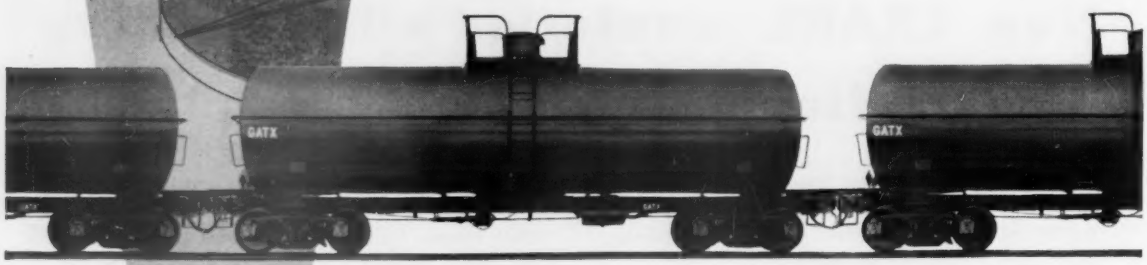
There's a GATX tank car that's built or can be built to meet your bulk liquid shipping needs. You can choose from over 200 types in the fleet of 48,000 cars designed, built and operated by General American. General American's 38 repair shops service these cars quickly and efficiently for you. For the *right* tank car for your product, write or call your nearby General American district office.



typical products successfully shipped in GATX pressure tank cars • *Anhydrous Ammonia* • *Butane* • *Propane* • *Ethylene Oxide* • *Propylene Oxide* • *Vinyl Chloride* • *Methyl Chloride* • *Ethyl Chloride* • *Chlorine* • *Carbon Dioxide*

features of GATX pressure tank cars*

All-Welded Tank, Jacket and Underframe • *Flued-Dome Construction*** • *Safety Dome Platform (Available)* • *Painting to Specification (Available)* • *Insulation* • *Specially Designed Fittings (Available)*

**Standard equipment unless otherwise noted.*

***The one-piece flued-dome saddle was designed and pioneered by General American as early as 1938.

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Mr. Langdon Has Written a "White Paper"

The discussion of the "Cabinet Committee Report" would awaken and hold more interest if generalities were put aside—and if, instead, the existing transportation situation were explained more often in terms of actual cases.

For example, it can be said as a general statement of fact, that: "The ICC has frequently denied the railroads permission to reduce their rates to recapture traffic, even when they could clearly make a profit with the reductions they proposed." That is one way—but not a very exciting way—of telling the story. Another way of conveying the same information would be to outline such facts as these:

> The railroads in Illinois noted that their traffic in petroleum products had fallen from 57 per cent of the total movement in 1940 to only 12 per cent in 1950. In an effort to attract back this lost business, the railroads tried to reduce their rates on it from a level slightly above truck rates to a charge averaging about 1½ cents per 100 lb below truck charges. They presented evidence showing that railroad costs were lower than truck costs for distances over 75 miles; and that railroad rates would have to be slightly lower than truck rates if the traffic were going to be diverted back to the railroads.
>
> In spite of this evidence, the ICC required the railroads to hold rates up to a level about equal to those of the trucks—indeed, for some destinations, at rates even higher than those charged by the truck operators. So the big movement of petroleum products in this area remained on the highways—not to the public's advantage.

The above citation is drawn (in our language, not the author's) from an article in the current issue of the Cornell Law Quarterly by Chairman Jervis Langdon, Jr., of the Association of Southeastern Railroads. The article, entitled "The Regulation of Competitive Business Forces: the Obstacle Race in Transportation," is a result of a study which Mr. Langdon has made of all decisions in ICC cases having to do with competition among the different forms of transportation, during the past 18 years or so. He reports the significant facts from typical cases; and a more contradictory record it would be hard to imagine.

Some of the ICC decisions make clear economic sense. For example, in the "Seatrain Case," the ICC refused to require this coastwise carrier of freight cars to raise its rates merely for the purpose of making competition against Seatrain easier for the "break-bulk" water lines. Similarly, in the "Arizona Petroleum Case" the ICC held that the "inherent advantage" of rail service is its low cost—and, accordingly, it refused to require the railroads to increase their rates, for the sole purpose of permitting their high-cost rivals, the tank truckers, to stay in business.

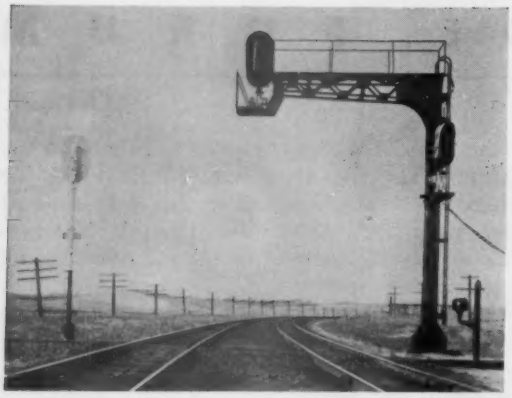
If all ICC decisions in competitive rate controversies had followed the rational economic pattern set in the Seatrain and Arizona Petroleum cases, no one concerned with the country's economic welfare would have much to complain about in the ICC's handling of this phase of its business. Unfortunately, however, this pattern has been contradicted as often as (possibly more often than) it has been followed. For example, the decision in the Illinois Petroleum Case, mentioned above, is incompatible, of course, with the doctrine of the Arizona and Seatrain cases. And consider this one (our language again, not Mr. Langdon's):

> After the war there was a considerable movement of imported scrap rail from Gulf of Mexico ports to Chicago. In order to compete with barges for this traffic, the railroads proposed a rate which would have yielded 8.7 mills per ton-mile and more than 54 cents per car-mile; the traffic to move in cars which would otherwise have to be hauled empty. The ICC found that, while the proposed rates would be reasonably compensatory, they would nevertheless be "unreasonably low" in view of the ICC's conception of its duty to help the barges hold onto traffic they had diverted or were diverting from the railroads.

Parenthetically, it should be noted that—while the ICC can and often does prevent the railroads from attracting traffic back from trucks and barges—it is utterly powerless to give the railroads parallel protection from having their traffic spirited away by barge and truck operators. This follows from the fact that only about one-third of truck traffic and less than one-tenth of water traffic is subject to ICC rate regulation.

Mr. Langdon's article deserves a place on the desk of every railroad man who has any duties in connection with explaining the "Cabinet Committee Report" to the public—because it provides a background of fact to show why the major recommendations of the report are in the public interest.

Mr. Langdon has written the kind of basic document which, in governmental parlance, is usually called a "White Paper," providing a documentary background for the recommendations of the Cabinet Committee report. If the people responsible for "communication" in the transportation industry will do their duty adequately with the information thus placed so easily within their reach, there oughtn't to be much doubt about the outcome.



EACH TRACK in double-track sections has signals for both directions.

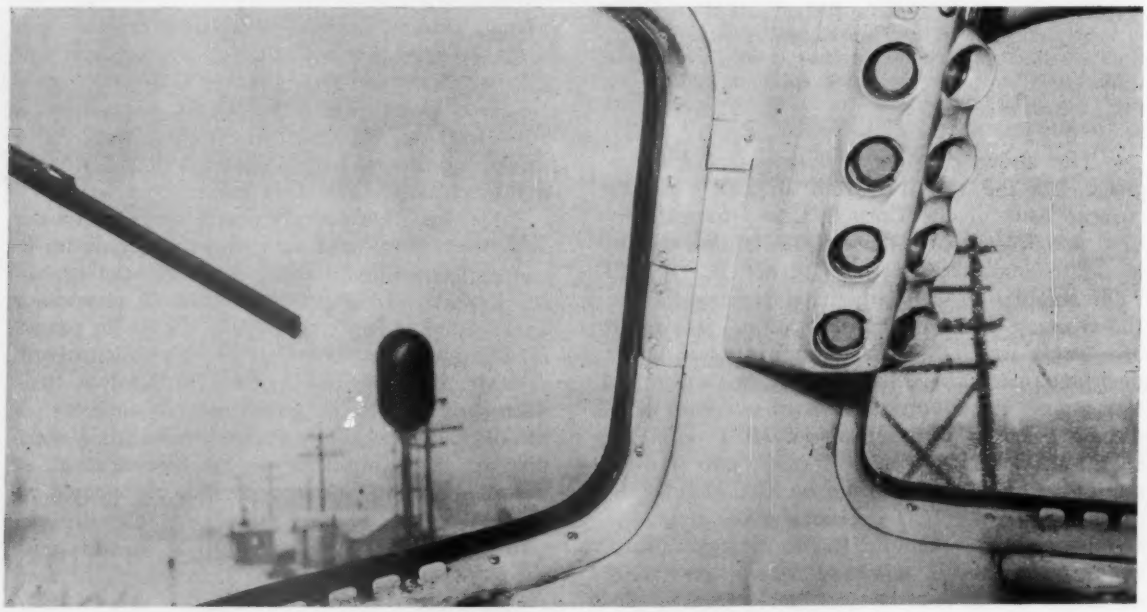
CTC for Both Ways on Each Track

Between Cheyenne, Wyo., and Laramie, about 56 miles, the Union Pacific has secured flexibility of train movements on double-track main line and newer single track low-grade line, totaling 177 track miles

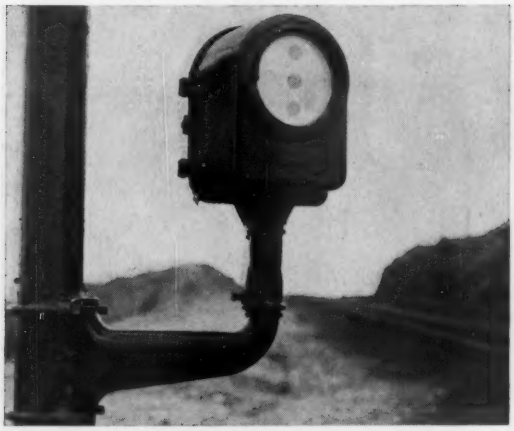
A good example of the benefits of signaling for train movements both ways on all tracks of multiple track lines is the installation on the Union Pacific main line between Cheyenne, Wyo., and Laramie. Between these points the existing heavy duty double track over Sherman hill includes long sections of grade at 1.55 per cent ascending westward. In recent years daily traffic over this double-track line amounted to some 24 passenger trains, 52 freight trains and 20 helper engine movements.

In order to save train time and utilize locomotives more effectively on long runs, as well as to eliminate helper service on this grade, the UP, in 1954, completed a new single-track line around the south side of Sherman hill on a maximum ascending grade of 0.82 per cent. The new single track is intended primarily for westbound freight trains, but some westbound passenger trains are also operated on this low-grade line. The double-track line is now used more effectively for passenger trains both ways, and for eastbound freight trains.

Previously, the double track was equipped with automatic signaling for right-hand running. Freight trains



THESE SIGNALS IN THE CAB of each locomotive show the aspects of wayside signals.



THESE INDICATORS warn motor car men of the approach of trains.

SPECIAL FENCE sets signals to stop approaching trains if rocks fall from this bluff.

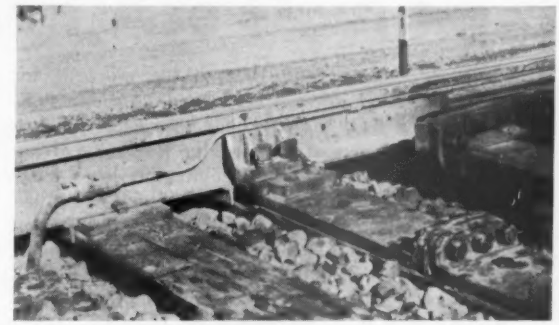
had to clear the main track for passenger trains, and, as a result, the freights lost too much time on sidings.

CTC on 177 Miles of Track

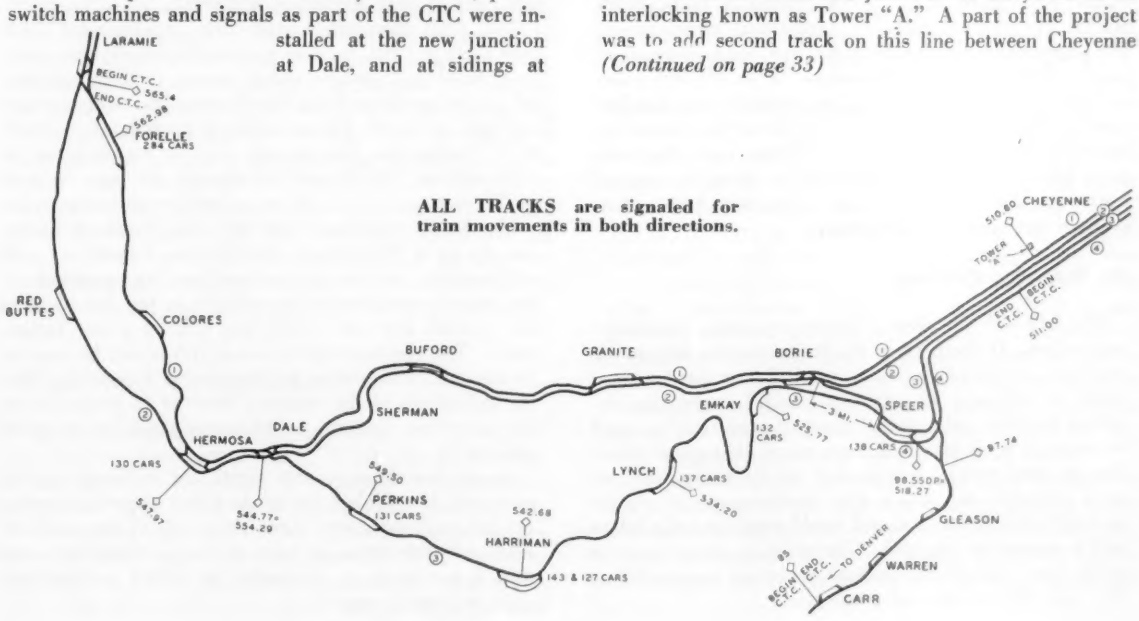
The new signal system includes centralized traffic control for train movements by signal indication both ways on both main tracks on the old line of 54.4 road miles between Cheyenne and Laramie; both ways on both tracks on 8.8 road miles between Cheyenne and the west end of Speer; both ways on 34.5 miles of single track on the new line between the west end of Speer and Dale; 12.7 miles of single track from Speer south toward Denver as far as the south end of Carr; and 3 miles between the west end of Speer and Borie. Thus the CTC includes 177 track miles of main track.

A mechanical interlocking at Borie included 4 switches, 1 crossover and 7 home signals. Numerous track and signal changes were made and the old interlocking was removed, electric switch machines and light signals being installed as part of the new CTC system. Also, power switch machines and signals as part of the CTC were installed at the new junction at Dale, and at sidings at Granite and Buford on the old line; at Emkay, Lynch, Harriman and Perkins on the new single-track line; and at Warren and Carr on the line south from Speer toward Denver. Formerly the single track line from Denver connected to the main line just west of Cheyenne in an interlocking known as Tower "A." A part of the project was to add second track on this line between Cheyenne

(Continued on page 33)



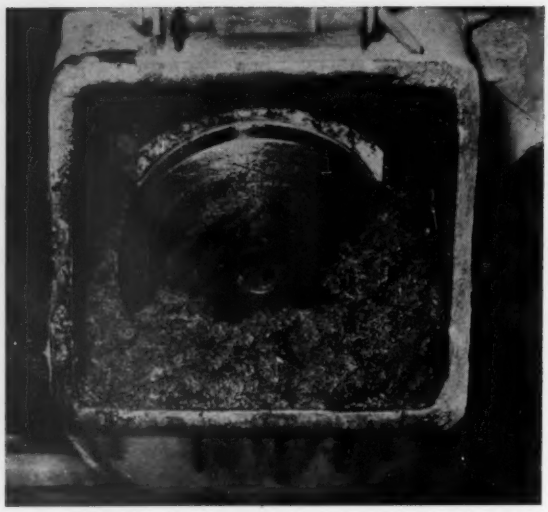
SNOW IS MELTED from switches by electric heater elements along the stock rail.



HOT BOXES — Causes and Cures 1

THIS SORT OF PACKING DEFINITELY IS . . .

On the Way Out



The waste-packed box will be with the railroads for years, but definite progress is being made to eliminate it. In the past two years the AAR has been exploring two outstanding developments affecting the frequency of hot boxes. These are the method of eliminating loose waste as a journal box lubrication medium and the method of eliminating excessive clearance between the journal and bearing diameter. They were the subject of a report to the recent meeting of Car Department officers in Chicago by W. M. Keller, executive vice-chairman and director of research of the AAR Mechanical Division.

Neither development alone is a cure for the hot box. Used in combination these techniques will not eliminate, but they should greatly reduce, overheated journals.

The roller bearing will reduce hot boxes to a point where overheated journals will no longer present a serious operating problem, said the report. Its cost is the main factor that requires evaluation. The present waste-packed box will be around for a number of years. With careful attention it gives an exceptional performance. The present standard design of bearing and waste packed journal boxes gave a performance of 42,000,000 miles per hot box on a group of box cars in merchandise service. There was nothing special about these boxes or bearings or the cars except that the cars were box cars never heavily loaded and the attention given the journal boxes was better than average. However, better than average servicing increases costs.

An Economic Problem?

The hot box problem is partly economic, the report emphasized. If there were no limitations on manpower required to service boxes a much better performance could be obtained. If extremely careful inspections, resetting packing, and thermal check of each bearing could be made at every terminal, there would be a great reduction in overheated journals, but the excessive maintenance required to obtain this performance would be economically impractical and would result in train delays which cannot be tolerated. Therefore, a search must be made for a simple mechanical means of accomplishing this end without excessive attention.

The lubricating pad is a possible answer to this quest, the report stated. Elimination of loose waste is desirable and many efforts have been made to accomplish it. Plypack, in the field for a number of years, is familiar to most car men. It acts as a waste container and retainer. The wire retainer is a means of holding loose waste or pads in position in the box and is in extensive use. The various lubricating pads developed all have been designed to prevent excessive pressure against the journal and thereby reduce the heat developed.

According to Mr. Keller, laboratory tests show that about half of the heat developed in the journal box is from waste pressure, and it is important to keep this pressure to the minimum required for proper contact of the pad on the journal to feed oil to the journal surface. Some of these pads or a modification of present designs will be developed to the point where not only will waste grabs be prevented but superior lubrication and reduced heat generation will result.

The AAR Research Center first experimented with pads early in 1952. Because responsible supply firms have since developed designs which appear to hold promise, the laboratory is confining its efforts to laboratory screening tests, on which the procedure is formulated to determine whether the designs will perform satisfactorily in road service. Mechanical lubricators are also in use, the Empire and N.M.B. kit being representative examples.

Mr. Keller explained that the AAR Research Center has set up a Microscopy and Friction Laboratory and will continue studies on improved bearing operation. It has under consideration a revision in the specification for journal box oil. Additives will be given further study. The previous studies on additives will be used as background information in progressing this work. Thus the technology of the elements involved in journal bearing operation continue to be investigated by the AAR laboratory.

In the two developments mentioned at the beginning, neither is in sufficient use to show any appreciable effect on hot box statistics. Less than 5% of the cars are equipped with either or both of these developments and this is too small a proportion to reflect a significant change in performance.

MEMBERS of the AIEE Land Transportation Committee in session at Chicago. Left to right, top row—S. W. Marras, secretary, AAR Electrical Section; R. W. Volpe, General Electric Company; G. J. Sennhauser, Jr., Chesapeake & Ohio; A. G. Oehler, *Railway Age*; H. P. Wright, Baltimore & Ohio; J. C. Price, General Electric Company; I. W. Lichtenfels, General Electric Company; J. W. Aydelott, General Electric Company. Lower row—J. L. Swarner, Pullman-Standard Car Manufacturing Company; P. G. Lessman, Westinghouse Electric Corporation; M. L. Swanson, Alco Products, Inc.; E. A. Foster, Fairbanks, Morse & Co.; J. H. Ray, Erie; C. W. Martin, Baltimore & Ohio.

What Electrical Men Are Doing

A report of some electrical problems studied by the AIEE Land Transportation Committee involving many different phases of railroading

Electrical engineers concerned with railroad operations gathered in Chicago last month to discuss new developments in their sphere of responsibility. The occasion was the fall general meeting of the American Institute of Electrical Engineers. Papers presented at that organization's Land Transportation Committee meeting are outlined below.

Fewer locomotive delays, longer gear life and reduced motor maintenance follow naturally when detection of surface flaws prevents gear tooth failures, the committee was told. Educated inspection also avoids the scrapping of gears because of surface irregularities which only look like flaws.

Ways and means of making the necessary inspections and tests were described by J. B. MacPherson and A. H. Prucknicki, both of General Electric Company. They called attention to the inspection techniques best adapted to indicate surface flaws, pointing out that gearing giving indication of flaws need not necessarily be scrapped and that in some instances the flaws may be corrected. In other cases, the character of the flaw, and the type of service may permit the part to be continued in use. They further emphasized that as skill and experience are gained in the techniques of inspection and the interpretation of results, road failures resulting from gear trouble will be reduced and the reliability level of motive power raised.

Shrink Fits and Taper Grinds

Another approach to life extension for gears and pinions was presented by M. C. Winstanley of Westinghouse Electric Corporation, in a paper on maintenance inspection of traction motor gears and pinions. He called attention to the fact that improved motor designs have in recent years increased gear loading from 40 to 60 per cent. This has materially increased service performance requirements of gears and pinions. He said that better tooth loading and reduced tooth stress may be obtained by the use of tapered-ground pinions, but they are not a cure-all. He put particular stress on the importance of pinion fitting and pinion advance for shrink fitting.

High potential d-c testing of electrical insulation was another subject discussed by the electrical engineers. A paper by M. C. DuBois of DuBois Engineering & Manufacturing Co., stated that when the required 1,050-volt insulation test for new equipment is made on motors and generators in service with a-c testing equipment, it frequently causes sufficient damage to the insulation to make it necessary to remove the equipment for repair. When the test is made with d-c equipment, it is often possible to anticipate such failure by observing the flow of current through the insulation as the voltage is raised.

Automation for Freight Yards

Reduction of time freight cars spend in yards is a major objective of nearly all railroads. In his paper, "Automation for Gravity Freight Classification Yards," A. V. Dasburg of General Railway Signal Company described recently developed speed-measuring and control systems which automatically retard cars and guide them to classification tracks in gravity yards, thus contributing to faster movement through yards. Uncoupled from the train at the crest of the hump, cuts consisting of one car or several coupled cars, having wide variations in rolling resistance, actuate equipment to select routes and determine proper releasing speeds as they move by gravity to couple safely with other cars.

Subjects for future meetings of the Land Transportation Committee include dirt and diesels, hot box radiation detectors, the atomic locomotive, the Milwaukee electrification, progress in the application of potted control components and electrical equipment for lightweight trains.

RENEWAL RATE of crossties for all Class I railroads is currently averaging about 70 ties per mile of maintained track per year. This presumes average service of 42 to 43 years. Estimates of service life are about 25 to 35 years.

IT'S A BIG QUESTION TODAY . . .

. . . When to Renew a Crosstie?

Tie producers are wondering when the railroads will find it necessary to step up their tie purchases above the record low levels now prevailing

The words "when to renew a crosstie" are repeated millions of times a year. On these words hangs the welfare of an entire business—the railway tie-producing industry—and also the safety and standard of maintenance of railway tracks.

This phrase was used as the title of an address by H. J. McKenzie, president of the Cotton Belt, at the annual luncheon of the Railway Tie Association at the Peabody Hotel, Memphis, on October 27.

The words "when to renew a crosstie" have unusual significance these days because the use of new wood crossties has slumped to a record low level during the last several years. This not only poses serious problems for producers of ties but also raises the question whether the railroads are putting in sufficient ties to maintain their tie condition to a satisfactory standard. Nearly every address and committee report at the three-day annual meeting of the RTA referred to the low state of tie renewals today and the problems created by it.

"When You Have the Money"

Mr. McKenzie said "the time to replace ties is when they fail by rot, or spike-killing or plate-cutting, but the real time to replace the tie is when you have the money that can be allocated for the material and labor to do the job." He does not believe, however, that "you can go on and on, cutting back allowances on ties, and get by with it, but there is a great deal of leeway between what you would like to do and what you may have to do on account of economic conditions. With the judicial use of a few new ties, you can get by for a time without impairing the safety of your railroad or causing rough track to the extent that you need slow orders."

If a graph were to be plotted, showing ties replaced each year, and also showing the financial condition of the railroads, "you would find that the up's and down's would have a great deal of similarity. In prosperous times, a little fat can be built into a railroad and tie standards improved, but then comes the little scare or recession and we go to living off the fat that we have built into the prosperity.

"This is what happened to the tie industry in 1954 when you experienced a decrease in replacements of 22 per cent. Railroad earnings began to drop off and it necessitated a reduction in maintenance expenses, and this caused most railroads to fall back on the improvements that had been made in track and structures during the several previous lush years, and on a rather large inventory of ties."

"There was still another reason that railroads discontinued the purchase of ties at the same rate they had been acquired for several previous years," declared Mr. McKenzie. "While being in the 52 per cent tax bracket had encouraged the installation of ties, it had also made the retirement of branch lines and side tracks not actually needed quite attractive. These tracks are nondepreciable property, and when retired are charged off to operating expenses. This provides a retirement with a 48-cent dollar, and besides, makes available secondhand ties which can be used for replacement purposes."

Mr. McKenzie feels that much has been done to extend the life of ties, "but we should not kid ourselves into thinking that we are getting service life of 42 years from ties as would be indicated by the total number of ties used in 1954."

Foresees "Chaotic Conditions"

The low level of current crosstie purchases, and the problems thereby created for the tie producers, moved the RTA to appeal to the railroads for remedial action, according to the annual report of J. H. Tabb, president of the RTA, and president of J. H. Tabb & Co. "Inventories and production have been so low," he said, "that any increase in demand will likely create a situation of short supply almost immediately and any emergency acting to increase demand sharply and suddenly could produce chaotic conditions."

In September of this year the Executive Committee of the association, becoming alarmed over the situation, "felt justified in calling the matter to the attention of highest railroad authority by letter. From replies we believe that our letter was well received and that those officers responsible for procurement will have additional support in acting promptly to protect their roads' requirements."

A successful project to obtain advance information about railroad tie requirements was also described by Mr. Tabb. As a result of a letter addressed to William T. Faricy, president of the AAR, a meeting was held of representative of the RTA and the Purchases and Stores and Engineering Divisions of the AAR. As a result, approval has been given for a questionnaire to member roads to collect data on inventory, anticipated purchases and anticipated use of crossties. From these reports, said Mr. Tabb, the AAR's Bureau of Railway Economics will prepare a summary of information by regional groupings without disclosure of any individual railroad figures. Copies of this summary will be furnished to the secretary of the RTA and all others concerned "just as soon as possible."

H. J. McKENZIE—"We should not kid ourselves into thinking that we are getting service life of 42 years from ties as would be indicated by the number used in 1954."

Is Somebody Being "Kidded"?

A more detailed account of the problems created for the tie producers by the present low level of crosstie purchases was given by E. J. McGehee, vice-president, Wood Preserving Division, Koppers Company. The attempts of the railroads to reduce maintenance and inventories by cutting crosstie purchases are commendable, said Mr. McGehee, "so long as they are not kidding themselves and their stockholders, but crosstie renewal figures for the last couple of years indicate that some may be doing just that."

On the basis of current renewals, he said, crossties are giving about 44 years of service. However, despite the technological improvements being made in the effort to prolong the life of ties," it hardly seems reasonable to expect crossties to last for more than 35 years on the average. If this assumption is correct, our railroads should renew about 30 million ties annually. The difference between that figure and the actual installations, which amounts to 8 million crossties, probably would cost the railroads, including installation charges, about $19 million after taxes. Actually, it would cost them nothing because eventually they will have to spend that money anyway."

The "bugaboo" of inventories was also discussed by Mr. McGehee. "Why railroads which have abundant cash should be so fearful of having a few good ties on hand is puzzling. Eventually they will use the ties, and the maintenance of a good stock would afford them protection in an emergency and help to eliminate peaks and valleys in our business. Ultimately, a full inventory policy would save money for the railroads."

Will Tie Renewals Now Go Up?

With current crosstie renewals at such a low ebb, the hopes of the producers are pinned on a revival of crosstie buying in the near future. This subject was dealt with in a discussion by M. H. Dick, western editor of *Railway Age*, of "Class I Crosstie Requirements in 1956." "To eliminate conjecture and guesswork" in making his estimate, Mr. Dick sent a questionnaire to the top engineering officers of 23 large railroads. Replies were received from 21, all of which gave estimates of their 1956 tie renewals. Since these 21 railroads normally use about half of the total Class I tie requirements, "it is evident that they provide an excellent sample from which to calculate a reasonably accurate estimate of total Class I needs."

On the basis of figures so obtained Mr. Dick estimated that the total Class I renewals in 1956 will be in the neighborhood of 24 to 25 million ties. This compares with estimated renewals of about 23 million in

DOUGLAS GRYMES, JR., is the newly elected president of the Railway Tie Association. He is vice-president and general manager of the Wood Preserving Division, Koppers Company.

1955 and approximately the same number in 1954.

Other information was made available through the questionnaire. For instance 20 of the railroads replying said that their current tie renewals are sufficient to maintain a reasonably adequate tie condition, and only one admitted that its tie renewals are insufficient for this purpose. "This presents us with an anomalous situation," Mr. Dick said, "for the total tie renewals of the Class I railroads for 1954 and 1955 are at a level which would indicate or presume an average tie life of 43 years. I think we will all agree that the actual service life of ties is nowhere near this level—not yet."

As another way of getting at whether current tie renewals are adequate, railroads receiving the questionnaire were asked if their present tie condition represents any deferred maintenance. Five of them answered in the affirmative, but 16 said they did not have any deferred maintenance in their ties. Eight of the roads replying to the questionnaire said they expect tie renewals to trend upward during the next five years. Eleven expect them to remain stable, and only two expect them to go down.

On the basis of the information developed through the questionnaire, Mr. Dick concluded that "a cycle of tie renewals is taking shape, of which the next phase would logically be upward. However, we must remember that whatever rise takes place will be affected by the fact that the life of ties, like that of people, is getting longer all the time."

Exploring the Export Market

Reduced purchases of ties by domestic railroads is causing the tie producers to give more attention to foreign markets in an effort to secure an outlet for their products. Frank W. Campbell, Jr., president of W. B. Crane Company, said that the steady decline of purchases by "our normal customers" has "created a vacuum in which the members in the tie industry are struggling to exist. To meet this development, many of us have had to turn to the business of exporting railroad ties in order to keep our organizations together and to provide a nucleus to start from, if and when the domestic railroads again enter the market for our products."

That the effort to develop the export market is meeting with some success was indicated in an address by A. E. Fivaz, program executive for primary forest products, U. S. Department of Commerce. In 1954, he said, "we exported nearly 1.9 million crossties, or nearly 12 per cent less than we shipped in 1953, but only about a third of the record quantity of 5.6 million exported in 1947. In the first seven months of 1955, our crosstie exports have been almost at the 1954 annual rate."

Largest foreign purchaser so far in 1955 was South Korea. West Germany took the second largest quantity in the early 1955 period, and Mexico, "our leading customer in 1954, is in third place so far this year." The United Kingdom is fourth, Austria is fifth, and Canada is sixth.

The progress being made in an effort to develop an economical and effective combined seasoning and treating process for crossties was described in an address by G. M. Magee, director of engineering research, AAR. The project, a joint venture with the National Lumber Manufacturers Association is aimed at finding a method of seasoning and treatment that will minimize checking and splitting of ties. The problem is to find a chemical that can "be added to keep the outermost tie fibers soft and pliable so they will not rupture, or partially fill the wood cells so the shrinkage stresses would not be so great."

Mr. Magee explained that, after considerable experimentation, it was found that ethylene glycol accomplished the desired results in a satisfactory manner. One phase of the research has been to determine whether the strength of the wood fibers would be damaged by the chemical or the elevated temperatures required in the process. Another is whether the process could be made economical in view of the cost of the glycol and other costs incidental to treatment, such as investment for equipment and the additional cylinder time required.

In describing tests employing an experimental treating cylinder on the Santa Fe at Albuquerque, N. M., Mr. Magee said that, with respect to the results obtained in eliminating checking and splitting, "the amount of improvement was not as great as hoped for, but it was apparent there had been considerable benefit, enough to indicate that further research for improvement and reduction in cost should be continued." The latest aspect of the project had been the treatment of 1,500 green oak ties for the Pennsylvania and 500 for the Illinois Central. These ties were treated in a plant of the Koppers Company in August of this year. "It is believed," said Mr. Magee, "that the real success of this experiment will be determined after several years service in heavy duty main-line track."

Other points brought out in addresses and committee reports at the meeting are that increasing interest is being shown in efforts to adapt hickory for use as crossties and that the association is continuing its efforts to find ways of reducing checking and splitting of crossties. Reporting on tie pads, a subcommittee of the Committee on Checking and Splitting of Crossties had this to say:

"The tie pad is in about the same position that tie plates were at the turn of the century. Tie plates were first used on sharp curves and on joint and quarter-

point ties when relaying rail, then on all curves when relaying rail. Wtih the advent of the creosoted tie, they were used on all new tie insertions. In other words they were first used where tie life was shortest and gage trouble the worst. The day is fast approaching when a tie pad will be considered just as necessary as a tie plate. One does not offer complete protection without the other."

In the election of officers Douglas Grymes, Jr., vice-president and executive assistant to the vice-president and general manager, Wood Preserving Division, Koppers Company, was moved up from first vice-president to president; Frank W. Campbell, Jr., president, W. B. Crane Company, was advanced from second vice-president to first vice-president; and Edward F. Schlafly, secretary, Potosi Tie & Lumber Co., was elected second vice-president. Members of the executive committee are D. B. Frampton, Jr., Kirby Lumber Corporation; W. L. Winham, T. J. Moss Tie Company; and Henry Webster, Western Lumber Company. Roy M. Edmonds was re-elected secretary-treasurer. The 1956 meeting will be held at the Hotel Roanoke, Roanoke, Va., October 24-26.

Letters from Readers

LET'S SETTLE THIS PER DIEM BUSINESS!

The writer of this communication is a responsible railroad officer of long experience. He asks us to protect his anonymity—which we shall do—on the valid grounds that facts, and not personalities, should be the controlling factors in discussing and resolving this vital question. We shall gladly accord the same anonymity to any other railroad man who wishes to make a further constructive contribution to the understanding of this important issue.—EDITOR

TO THE EDITOR:

Current loadings have been on the point of exceeding those of 1953, and yet the railroads have had 67,000 less cars to use in accommodating them. It is one thing to carry sufficient equipment for occasional peak demands; it is quite another thing to be unprepared to carry the same traffic level as in the past. The present railroad car shortage has developed in connection with a traffic level the same as two years ago. For this situation the railroad industry has plenty of excauses, but no really valid one.

It is repeatedly said that an inadequate per diem rate is responsible for an inadequate car supply. If that is so, then who is to blame? There is nothing in the Interstate Commerce Act which would preclude the railroads from agreeing on any per diem rate they desire. The reason the ICC comes into the picture is that the railroads have to resort to it when unable to agreee among themselves. Railroad people frequently criticize the ICC for "invading managerial prerogatives," but when these same railroads are faced with a tough problem such as per diem, they pass the problem to the ICC for decision.

The incapacity of railroad managements to solve such tough internal questions as per diem suggests an undersupply of imagination and discipline. Only an imaginative and disciplined railroad industry can hope to be able to stabilize its competitive position vis-a-vis the motor and water carriers, and continue to be the backbone of transportation in this country.

Why the Disagreement?

The controversy over per diem—a controversy which has been going on for years and threatens to be interminable—is the result of an insistence on the part of the large car-owning lines that a uniform rate be effective throughout the country, without modification save for per diem reclaim of qualified short lines. Under this approach the procedure is to average the ownership costs of all car-owning railroads and to translate such costs into terms of one average rate.

What does an average per diem rate mean?

It means that Railroad A whose physical situation is such that it can average 70 car-miles per car-day pays exactly the same amount of car-hire all other factors (being equal) as Railroad B whose operating performance is necessarily limited to 20 car-miles per car-day.

It means that Railroad C whose freight car ownership includes much modern equipment, often with special devices, receives exactly the same amounts of car-hire from Railroad D (all other factors being equal) as Railroad D receives for its fleet of cars, none of which is in Class A condition.

Car Pool in Theory Only

Such results are of course absurd, and yet they are the consequences of a uniform per diem rate. Such a rate might make sense *if* every railroad, within an average 24 hours, were able to obtain essentially the same car use and *if* the equipment of every railroad represented about the same average investment and the same degree of maintenance. But it makes no sense under the wide variety of conditions presented by the individual railroads. To say that the wide disparities in conditions "wash themselves out" under an average rate is equivalent to saying that railroads constitute one national system with an equipment pool. No such national system exists, and there is no equipment pool except in theory.

Moreover, a uniform per diem charge, as its name implies, makes the assumption that freight car ownership costs are variable only with time. Such an assumption is false. Two of the most important items in ownership cost, i.e., freight car repairs and depreciation, are variable with distance (car-miles) as well as with time (car-days). In fact, a recent study shows that approximately one-half of all ownership costs are variable with distance, and the rest are variable with time. This means that Railroad A with its average of 70 car-miles per car-day incurs much greater ownership costs during an average 24 hours of car-hire than Railroad B with an average of 20 car-miles per car day.

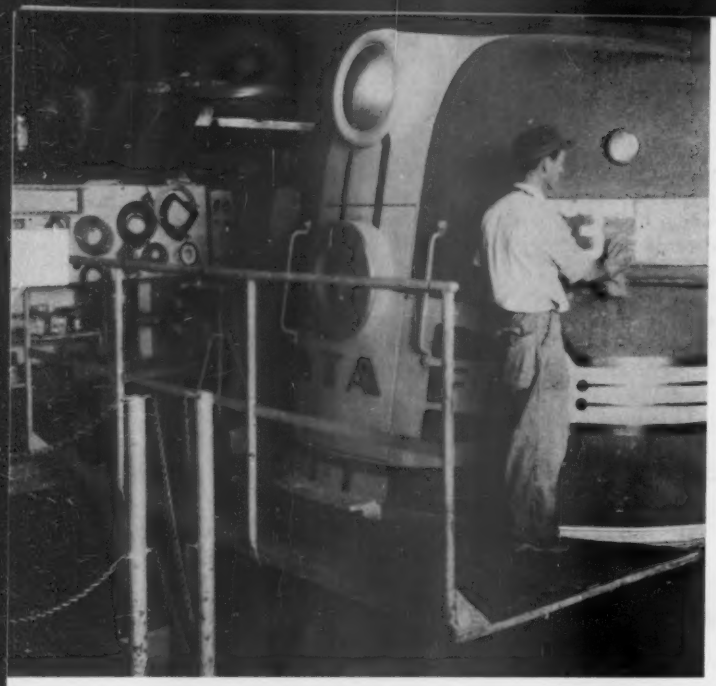
What Can Be Done About It?

The time has come to put away the unrealistic concept of an average per diem rate. It fits only the average railroad, and no railroad is average. One suggestion would contemplate three basic rates, their application to depend upon whether the using railroad, in its car-miles per car-day, has (1) an average performance, (2) an above-average performance, or (3) a below-average performance. Furthermore, the three basic rates should be subject to modification depending upon whether (1) the particular equipment is modern (125 per cent of the basic rate), or (2) average (100 per cent of the basic rate), or (3) below average (75 per cent of the basic rate).

An alternative suggestion would contemplate a per diem charge for those ownership costs variable with time and a mileage rate for those expenses variable with distance. Under either suggestion, there must be a minimum charge to catch the overhead or terminal line which receives cars after midnight and passes them on before the next midnight. Under the present system, these lines may escape car-hire completely, or almost so.

The accounting people may not be happy with more than one rate for car-hire, but if the job is too much for them, the industry could turn it over to the mechanical brains which are presently available.

"X"



Sliding end platform which makes it safe and easy to work on the front end of a diesel.

Permanent single scaffold and steps give easy access to the locomotive roof.

Safety IS First at Barstow

With a total of 565 diesel units serviced and maintained at the Barstow, Cal., shops of the Santa Fe, great emphasis is placed on efficiency and production, but safety receives first consideration. It is possibly surprising how often a shop which specializes in safe operation also has a favorable record of output.

Special attention is paid to safety work at Barstow, as well as all other shop points on the Santa Fe, and a record board shows that Barstow now stands in third place. This shop won the system safety award in 1953 and 1954.

In the promotion of safety, periodic meetings of all groups are held at the beginning of every shift. Each group takes up individual safety rules and discusses them. There is a safety monitor in each group and also a safety committee of 25 men headed by the shop superintendent.

An illuminated shop safety board carries the name of each supervisor with a light that is changed the first of each month: green if no injury; yellow, non-reportable; and red, reportable. This safety board also lists committee men and is watched regularly by all employees.

Suggestions for increased safety in shop operation are discussed and adopted if practicable. One of the most interesting of these is the special safety end-platform, illustrated, which greatly facilitates working on headlights, preparing classification number glasses and painting.

The platform is 3 ft wide, has a guard rail on the back and safety chains on the end. It is made with a metal frame and wood floor, designed to slide clear instead of being crushed in case the hostler overshoots the stopping mark.

Another safety feature is a small locking, non-skid steel plate installed at each of the four corners of General Motors Type GP locomotives while in the shop to give workmen a safe, easy passage from the ramp to the locomotive deck.

The thought was advanced at one of the safety meetings that the elimination of portable hand ladders as a means of access to locomotive roofs and hoods would prove beneficial in three ways: namely, reduce hazards, avoid marring locomotive side finish, and afford easier access (1) to locomotive roofs for checking operation of cooling fans and grid blowers and listening for valve blows; and (2) to the hood to wash windshields and clean and adjust air horns.

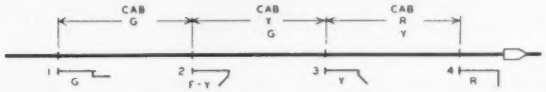
Permanent overhead scaffolds with narrow steps leading to them were designed and installed, only a single scaffold being required for one track but a double scaffold between tracks, so one ladder gives access to the roof of the locomotive on each track. (A single scaffold and ladder arrangement is illustrated.)

These scaffolds and steps utilize welded steel construction, with antislip steps and walkways, pipe safety hand rails and safety chains at walkway ends. Space under the scaffolds, which might otherwise be wasted, is used for tool cabinets, thus keeping tools easily accessible, also making it easier to keep platforms clear and orderly —an added safety feature.

CTC FOR BOTH WAYS ON EACH TRACK

(Continued from page 25)

and Speer, and to make corresponding changes in the tracks and interlocking at Tower "A." The entire CTC installation includes 73 power machines, 25 electric locks on handthrow switches, and 92 lever-controlled signals.



ASPECTS DISPLAYED by wayside signals and by cab signals as a train proceeds through the territory are shown in the diagram. With a train occupying the block of Signal 4, that signal displays Red, Signal 3 displays Yellow, Signal 2 displays Flashing-Yellow, and Signal 1 displays Green. While a locomotive is going from signal 1 to Signal 2, the cab signal displays Green; from Signal 3 to Signal 4 the cab signal displays Yellow-over-Green; while going from Signal 3 to Signal 4, the cab signal displays Red-over-Yellow. If the locomotive should pass the Red wayside signal 4, to enter the occupied block, the cab signal continues to display Red-over-Yellow.

Track Indicators for Motor Cars

As part of the new CTC project, position-type track-occupany indicators were installed at various locations to warn employees of approaching trains. They are usually mounted in pairs, one for each direction, and are more numerous on curves where sight distances are relatively short. The numbers on each indicator designate the mile post to which it is effective. The indicators are spaced on time-distance factors, considering the motor car as moving at 10 mph and trains at the maximum speed allowable in the territory over which the indicator will govern. If a motor car passes an indicator showing "Clear," it has time to reach the next indicator before a train arrives. The indicator circuits are controlled by track-repeater relays, and are independent of signal control circuits.

Rock Slide Detectors

At several places the new single-track line extends through deep cuts with steep rock walls. Rock slide detectors were installed in these cuts. Woven wire fencing is supported from 3/8-in. galvanized iron stranded messenger attached to wood posts. At the center of each fence the fencing is attached to a "floating" section of 3-in. by 3-in. wood, attached to the ends of the woven wire fencing and under tension of coiled springs to hold the fencing taut. A circuit controller is connected to the 3 by 3 piece of wood. If a falling rock strikes the fencing, the piece of wood is moved, and the circuit controller is operated to cause the signals in approach from both directions to display the red aspect until the controller is manually reset.

Electric switch heaters of the "rod" type are attached to the inside of the web of the stock rails. These heaters, made by General Electric, are rated at 500 watts to the foot for the first 8 ft starting at the switch point, and the rating tapers to 250 watts per foot at the far end, the total rating being 16 kva for the heaters on both rails at a switch. These heaters are fed at 440 volts, and special line transformers rated at 50 kva are provided at such locations.

This CTC project was planned and installed by Union Pacific signal forces. The major items of signaling equipment were furnished by the Union Switch & Signal Division of Westinghouse Air Brake Company.

Supply Trade

(Continued from page 13)

Boston and Hartford territories, has been transferred in that capacity to the Pittsburgh district office.

Beaver Pipe Tools, Inc., has appointed **William H. Vaught, Sr.,** district manager at Cincinnati. His territory includes Kentucky, West Virginia and southern Ohio and Indiana.

L. B. Foster Company has established new warehousing facilities at Buffalo, N.Y., for steel rail and track accessories, steel sheet piling and pipe.

Bucyrus-Erie Company has appointed **Syracuse Supply Company,** 294 Ainsley Drive, Syracuse, distributor for central New York territory.

The **Dayton Rubber Company** has appointed **A. E. Meyer** sales engineer for the railway division with territory embracing southern Ohio and Indiana, western Pennsylvania and northern Kentucky. **John J. Haher** has been named district manager for the railway division. His territory will include the northern Ohio and general Great Lakes regions.

A. G. MALONE, who has been appointed national sales manager for water cup, government and transportation sales, Dixie Cup Company. He previously had various regional sales assignments.

Vapor Heating Corporation has announced the following transfers of railroad sales and service men: **William Daley,** St. Louis, Mo., to Richmond, Va.; **James Murray,** Chicago to Atlanta, Ga., and **H. H. Peplow,** Chicago to St. Louis.

Allen Engineering Associates, Inc., has appointed **B. M. Brown** vice-president in charge of the transportation research division. Mr. Brown retired as general superintendent motive power for the Southern Pacific, August 1, 1955 (*Railway Age,* August 15, page 54).

Sanford J. Keeshin has been elected vice-president, operations, **Railroad Transfer Service, Inc.** The firm handles passenger transfer between Chicago stations (*Railway Age,* October 17, page 10).

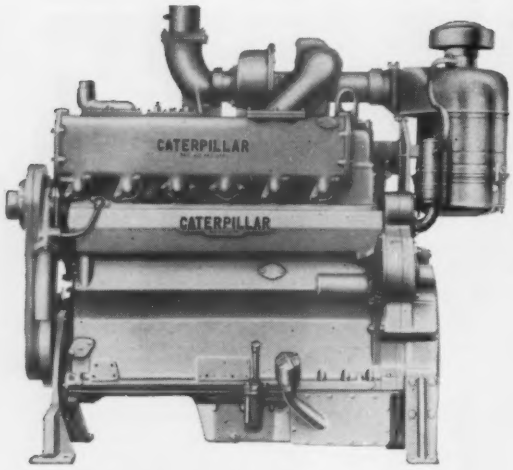
R. C. Mahon Company, Detroit, has established a sales engineering office at 420 Lexington Avenue, New York.

Torman Company has appointed the following agents: Charles E. (*Continued on page 38*)

Announcing 2 more new

The new D337

Series F with Turbocharger

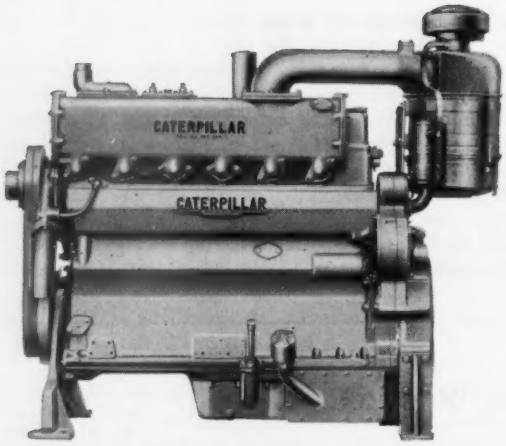


310 HP

maximum @ 2000 r.p.m.

The new D326

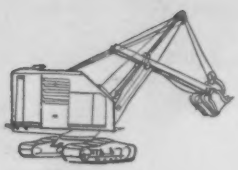
Series F



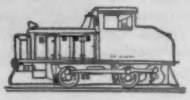
200 HP

maximum @ 2000 r.p.m.

MODERN, COMPACT, HEAVY-DUTY UNITS FOR



- Compressors
- Cranes
- Excavators
- Locomotives
- Boats
  - Work
  - Passenger
  - Ferry



- Electric Power
  - Auxiliary
  - Full time
  - Portable
  - Standby
- Pumping
- Rock Crushers
- Ballast Machinery

Available as original power in many types of equipment . . . direct drive or choice of transmissions, including hydraulic couplings and torque converters. Also available as Electric Sets and Marine Engines.

CAT* RAILROAD DIESELS

CHOICE OF 3 STARTING SYSTEMS

AIR

For fast starts where a supply of compressed air is readily available, a sturdy vane-type air motor is offered. Also available: air compressors and storage equipment.

ELECTRIC

Where speed of starting and convenience are of greatest importance. Also available: automatic start-stop controls which require no operating personnel.

GASOLINE

For all-weather starting. This system preconditions the diesel and supplies full lubrication before the diesel is started. Also available: electric starters for the gasoline starting engine.

Here are the two newest diesels in Caterpillar's modern, heavy-duty line—more efficient, more compact and more powerful than the units they replace. In *any* application, they offer you more for your money than *any* engines in their power range!

Major advances in design and time-tested Caterpillar features combine to make this power pair more productive and economical to operate than ever. For example:

• New Turbocharger (in the D337 Series F) utilizes exhaust heat to drive supercharger. Delivers air in direct proportion to engine's need—less air at low load, more air at full load.

• New hydraulic valve lifters practically eliminate valve adjustment and provide quiet operation.

• New, improved water jets deliver fan-shaped flow, provide more effective cooling.

• Heavy-duty, oil-cooled pistons with chrome-faced rings, built for thousands of hours of work before inspection is necessary.

• Sealed cooling system reduces mineral deposits.

• Full-flow filtering of fuel and lubricating oil.

• A complete line of attachments to meet all your requirements.

All these and other features add up to a new standard of performance—better operation and more power with less maintenance and long life. For full details, see your Caterpillar Dealer. You can always count on him for reliable information and prompt service!

Caterpillar Tractor Co., Peoria, Illinois, U.S.A.

CATERPILLAR*

*Caterpillar and Cat are Registered Trademarks of Caterpillar Tractor Co.

NEW D337 Series F and NEW D326 Series F— LATEST EXAMPLES OF CATERPILLAR LEADERSHIP IN ACTION

MAIL TODAY!

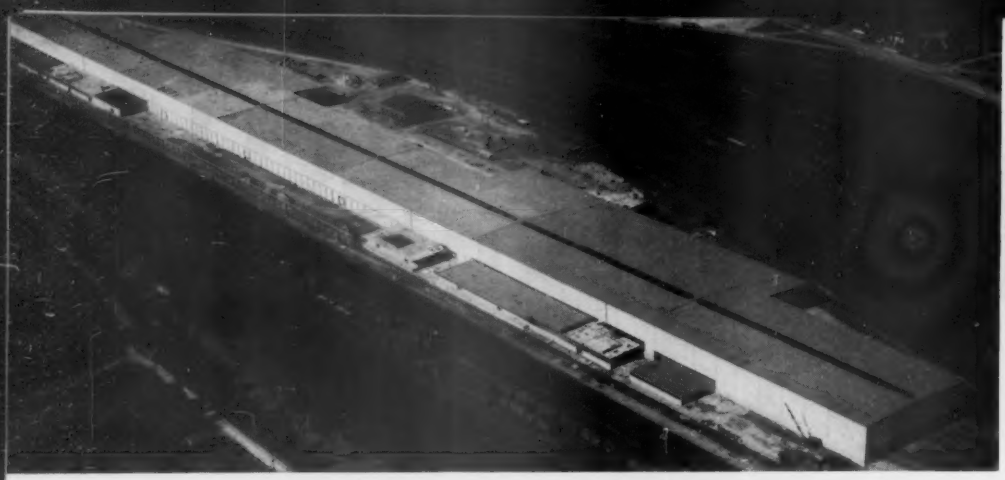
CATERPILLAR TRACTOR CO., Peoria, Ill., U. S. A.

I'd like more information on the new D337 Series F ☐, D326 Series F ☐.

Name _____

Address _____

City _____ **Zone** _____ **State** _____



NEW, HALF-MILE LONG freight car repair shop—viewed from the air—looks like the deck of a super aircraft carrier. Named for the Pennsylvania Railroad's ninth president, the "Samuel Rea" will combine all repair operations under one roof.

TO HELP EASE THE SHORTAGE OF ROLLING STOCK

Pennsylvania Railroad Sets Up World's Largest Car Repair Shop, Uses G-E Power Distribution System

To help solve the present freight car shortage by getting more cars back on the road quicker, the Pennsylvania Railroad has invested in the newest and largest freight car repair shop in the world—the half-mile long "Samuel Rea" repair shop at Hollidaysburg, Pa. This new installation, which will be pressed into full service late next Spring, consolidates the repair work now being performed by the Pennsylvania at 12 different locations around the railroad. By combining repair operations under one roof and using production line methods of work, this giant four-track, steel-frame structure will have an initial capacity for rebuilding 50 cars of all classes a day. Later, by working added shifts, the capacity will be increased to 80 cars or better.

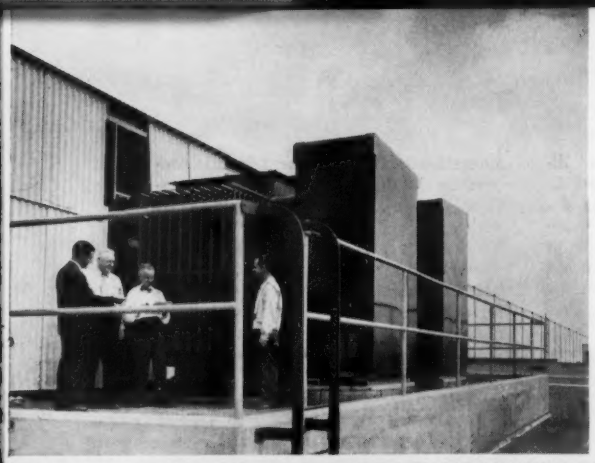
For adequate distribution of power and to protect the electrical circuits in this new and important facility, up-to-date G-E electric equipment has been installed at strategic locations throughout the huge shop. Among the General Electric equipment included in the plant's power distribution system are five outdoor substations totalling 14,000 KVA transformer capacities (together with the associated switchgear); metal-clad incoming-line switchgear units; and some 2200 KVA of dry-type transformers.

General Electric, world's largest manufacturer of electrical apparatus, has a complete line of power distribution equipment that can be tailored to fit the requirements of *any* railroad installation—*large or small.* For further information on G-E power distribution systems, call your nearest G-E Apparatus Sales Office. General Electric Company, Schenectady 5, N. Y. 152-58A

Progress Is Our Most Important Product

GENERAL ELECTRIC

WORKING CLOSELY TOGETHER, railroad officials, electrical contractor and G-E representatives planned shop's electrical system. Shown here are (l. to r.) C. J. Henry, Chief Engineer—Eastern Region, Pennsylvania R.R.; W. S. O'Sullivan, G-E switchgear specialist; W. R. Govett, Vice President and Chief Engineer, Harry F. Ortlip Co.; R. E. Nopper, G-E transportation sales engineer; and H. M. Wood, Assistant Chief of Motive Power—Cars, Pennsylvania R.R.



COMPACT G-E UNIT SUBSTATION, one of five installed at world's largest freight car repair shop, is double-ended with 1500 KVA of transformer at each end.

MODERN G-E METAL-CLAD SWITCHGEAR equipment in main switching station provides control and protection of the incoming power line. This type of equipment offers highest safety for personnel.

INSIDE SWITCHGEAR ROOM of G-E substation, low-voltage drawout circuit breakers are easily inspected. Breakers fit in sturdy metal compartments as shown below.

HEAVY REPAIR WORK on cars of all classes will be performed once the huge shop is readied for full operation. At present, only minor repairs are being carried out. Above, repairmen work on underside of a gondola car. In top center of photo, two G-E dry-type single-phase transformers feed power to overhead fluorescent lights.

Supply Trade

(*Continued from page 33*)
Barnes, **Barnes Supply Company,** San Francisco, and Leo F. Duffy, president, **Railroad Repair & Supply Co.,** Chicago.

W. M. Champion, assistant sales manager at Oklahoma City for **Air Reduction Sales Company,** has been appointed district manager of the Shreveport, La., sales office, to succeed **John Lund.**

Railway Maintenance Corporation has appointed **Mississippi Supply Company,** 80 East Jackson boulevard, Chicago, sales representative for Chicago railroads.

Henry J. Barbour has been appointed manager of advertising and public relations of **Fairbanks, Morse & Co.,** to succeed **L. A. Harlow,** resigned.

Financial

ICC Told It Lacks Power To O.K. D&H-NH-B&M Pact

The Interstate Commerce Commission has been advised by Examiner Homer H. Kirby to find itself without authority to approve a proposed agreement among the Delaware & Hudson, Boston & Maine, New Haven, and the latter's president, Patrick B. McGinnis. At the same time, however, the examiner also advised that, if the commission disagrees and takes jurisdiction, it should disapprove the agreement.

The agreement contemplates withdrawal of the D&H's opposition to Mr. McGinnis' pending application for authority to serve as president and director of the B&M while continuing in the New Haven presidency. It is designed to assure the D&H that its position as a connection of the B&M at Mechanicsville, N. Y., would not be worsened by favorable commission action on the McGinnis application. Proceedings in the latter case have been suspended since execution of the agreement, terms of which were outlined in *Railway Age*, August 1, page 13.

The proposed report made by Examiner Kirby is in the case involving the application filed by the B&M for approval of the agreement under the Interstate Commerce Act's section 5(1), which contains provisions authorizing the commission to approve arrangements for pooling traffic, revenues or services. The agreement, he said, provides for no pooling—"at the most, it merely restricts to a limited extent the opportunity to obtain traffic."

He also put it this way: "Simply stated, the [cited] testimony means that, by agreeing to withdraw its opposition to McGinnis' interlocking directorship application, the Delaware & Hudson is hoping to insure his neutrality in the routing of traffic via the Mechanicsville gateway. The corollary is that the consideration given by that carrier for the agreement has nothing to do with traffic, which, presumably, is the subject matter of the agreement."

Related Cases—A proposal to consolidate the present case with the directorship proceeding has been rejected by the commission. The proposal was a motion filed by the Massachusetts Department of Public Utilities, which opposes commission approval of the agreement. Examiner Kirby seems to think that, if the commission rejects his advice and accepts jurisdiction in the agreement case, it would be best to decide the directorship case first. In that connection, the proposed report said:

"One pervading difficulty in the consideration of the agreement in this proceeding is that it is not the conventional type . . . Section 5(1) . . deals with carriers; it says nothing about individuals. . . . True it does not expressly forbid individuals from entering agreements; but the subject matter of the statute is traffic, services, and earnings of carriers. Obviously, individuals have no traffic or services to pool or divide. . . .

"In the instant proceeding, there is only one individual involved as a party to the agreement, but he assumes greater importance in the whole picture than any of the participating carriers He is involved here because he is the principal party in another proceeding, now suspended, before the commission. In considering questions of competition and restraint of competition among carriers in the instant proceeding, it is impossible to disassociate this individual from his connection with the other proceeding which brought about this one . . . Here again, as with respect to the question whether this agreement will result in better service to the public, there is justifiable doubt that prior to the full consideration of the interlocking directorship application, the agreement can be found not to restrain competition"

Chesapeake & Ohio.—*Mergers of Subsidiaries.*—The ICC has approved the merger into this road of two subsidiary lines, the Flint Belt and the Manistee & Northeastern (*Railway Age*, August 22, page 15).

Chesapeake & Ohio.—*Dividend Rate Increased.*— The C&O's directors have increased the annual dividend rate on the road's common stock from $3 to $3.50. The new rate, 87½ cents quarterly, will be effective with the dividend payable December 20 to stockholders of record December 1. Walter J. Tuohy, C&O president, said the increased rate has been made possible by the company's growth in earning power.

Claremont & Concord.—*Reincorporation.*—The ICC has authorized the steps to permit this road, incorporated in Delaware, to reincorporate itself in New Hampshire to comply with the request of the Public Utilities Commission of that state (*Railway Age* August 22, page 15). Involved is the conversion of 500 shares of Delaware stock into a like number of shares of the New Hampshire company.

Pennsylvania.—*Sale of Virgina Ferry Corp.*—The Chesapeake Bay Ferry Commission of the state of Virginia will purchase the assets of the Virginia Ferry Corporation, owned one-half by the PRR and one-half by the public. David C. Bevan, PRR vice-president—finance, said the agreed purchase price is $13,000,000 and the transaction is to be completed this year. Virginia Ferry operates ferry service for passengers and motor vehicles across Chesapeake Bay be-

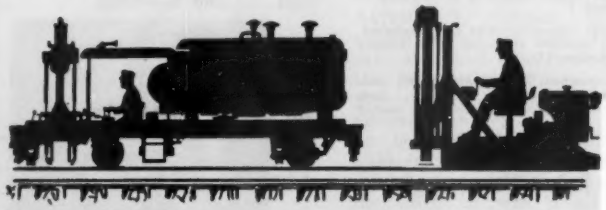
GEORGE WESTINGHOUSE, founder of the Westinghouse Air Brake Company, has been elected to the Hall of Fame for Great Americans at New York University. Inventor of the railroad air brake and other devices in the transportation and electrical fields, he died in 1914. A bronze likeness of him will be placed in the Hall of Fame colonnade on the Bronx campus of the university, along with those of 85 other persons honored since the award was first made in 1900.

You'll Find

EXTRAORDINARY SAVINGS

in this Track Maintenance Combination

1. R.M.C. TieMaster removing old ties and inserting new ones at a rate of one per minute.
2. R.M.C. SpikeMaster nipping up the ties and driving four spikes.
3. McWilliams Ballast Distributor placing ballast in perfect position for tamping.



4. McWilliams Tie Tamper with split head using controlled pressure to compact ballast under the ties.
5. R.M.C. LineMaster aligning the track by moving it horizontally in either direction.

Each of the machines shown here is recognized as the most efficient and economical means of doing its job. When used in combinations of two or more machines, R.M.C. Equipment provides even greater savings in track maintenance costs.

Railway Maintenance Corporation

PITTSBURGH 30, PA.

tween Little Creek, Va. (near Norfolk), and Kiptopeke, Va., on the eastern shore.

Securities

Authorizations

BANGOR & AROOSTOOK.—To dispense with competitive bidding requirements in connection with a contemplated issue of $8,500,000 of refunding bonds as part of a proposed recapitalization, authority for which is to be sought in a separate application to the ICC (*Railway Age*, October 24, page 55).

CHICAGO & ILLINOIS MIDLAND.—To issue $7,600,000 of 4¾% promissory notes of which $1,000,000 are to be sold for cash to the trustees of the Commonwealth Edison Service Annuity Fund, proceeds to be used for purchase of new equipment; $2,600,000 are to be delivered to the fund trustees to discharge an equal amount of C&IM 4 and 5% serial notes held by them; and $4,000,000 are to be delivered to Commonwealth Edison Company to evidence an equal amount of cash advances by the company to the C&IM (*Railway Age*, August 8, page 59).

CHICAGO & NORTH WESTERN.—To assume liability for $3,900,000 of equipment trust certificates, first installment of a proposed $11,700,000 issue, to finance in part purchase of 1,575 box cars and 500 gondola cars at an estimated cost of $14,630,000 (*Railway Age*, September 26, page 43). Dated November 1, the certificates will mature in 15 annual installments of $260,000 each beginning November 1, 1956. Division 4 approved sale of the securities at an interest rate of 3⅝% for 99.51—the bid of Kidder, Peabody & Co. and five associates—which will make the annual cost of the proceeds to the road approximately 3.74%. The securities were reoffered to the public at prices yielding from 3.2 to 3.625%, according to maturity.

DELAWARE, LACKAWANNA & WESTERN.—To extend from November 1, 1955, to November 1, 1975, the maturity date of $16,289,000 of Morris & Essex construction mortgage gold bonds, consisting of $6,517,000 series A and $9,772,000 series B.

PENNSYLVANIA.—To assume liability for $7,965,000 of equipment trust certificates to finance in part purchase of 50 diesel-electric units and 160 covered hoppers at an estimated total cost of $10,635,000 (*Railway Age*, September 26, page 43). The securities, dated November 1, will mature in 15 annual installments of $531,000 each beginning November 1, 1956. Division 4 approved sale of the certificates at an interest rate of 3⅛% for 99.258—the bid of Salomon Bros. & Hutzler and three associates—which will make the annual cost of the proceeds to the railroad approximately 3.27%. The certificates were reoffered to the public at prices yielding from 2.9 to 3.25%, according to maturity.

SOUTHERN PACIFIC.—To issue $22,200,000 of 3⅞% debentures maturing May 1, 1981, to be sold to the trustee of the road's contributory retirement plan for salaried employees, proceeds to be used to reimburse the road's treasury for capital expenditures (*Railway Age*, June 20, page 90). Employees who participate are entitled to annual retirement income of not less than 30% of total individual contributions, up to $37,500, and will contribute 3% of all monthly income over $350, up to $156 a month.

Dividends Declared

CHESAPEAKE & OHIO.—common, 87½¢, increased quarterly, payable December 20 to holders of record December 1; 3½% convertible preferred, 87½¢, quarterly, payable February 1, 1956, to holders of record January 6.

GREAT NORTHERN.—62½¢, quarterly, payable December 19 to holders of record November 25.

ILLINOIS CENTRAL.—87½¢, increased quarterly, payable December 12 to holders of record November 9.

KANSAS CITY SOUTHERN.—common, 75¢, quarterly, extra, 50¢; both payable December 31 to holders of record November 30; 4% non-cumulative preferred, 50¢, quarterly, payable January 16, 1956, to holders of record December 30.

LEHIGH VALLEY.—30¢ quarterly, payable November 18 to holders of record November 4.

STEAM IS REVIVED on the Western Pacific for one day, October 13. Wood burning, ex-Virginia & Truckee locomotive No. 12, with two cars, spearheaded the Bay Area United Crusade fund drive with a run from Oakland Calif., to Niles. The crusade special met the vista-dome "California Zephyr" eastbound at San Leandro and westbound at Niles.

NASHVILLE, CHATTANOOGA & ST. LOUIS.—$1, quarterly, payable December 1 to holders of record November 9.

NEW YORK CENTRAL.—50¢, quarterly, payable December 10 to holders of record November 18.

NORFOLK & WESTERN.—75¢, quarterly; extra, 75¢; both payable December 9 to holders of record November 10.

PENNSYLVANIA.—25¢, quarterly; year-end, 50¢; both payable December 12 to holders of record November 7.

READING.—4% non-cumulative 1st preferred, 50¢, quarterly, payable December 8 to holders of record November 17.

SOUTHERN.—common, 75¢, quarterly; 5% non-cumulative preferred, 62½¢, quarterly; both payable December 15 to holders of record November 15.

Security Price Averages

	Nov. 1	Prev. Week	Last Year
Average price of 20 representative railway stocks	90.92	91.65	70.64
Average price of 20 representative railway bonds	97.66	97.78	96.25

New Facilities

Saudi Arabia Invites Bids On Railroad Construction

The Ministry of Finance and National Economy in Jiddah, Saudi Arabia, has invited bids for construction of the Riyadh-Medina-Jiddah Railroad with its four branch lines and all related works, according to Foreign Commerce Weekly. Copies of the specifications and bidding conditions may be obtained from the Saudi Arabian Embassy, 2800 C Woodland Drive, N.W., Washington 25, D.C., for $168 a set.

Chicago & North Western.—The Ridge Avenue viaduct in Evanston, Ill., is being reconstructed at a cost of $1,500,000. The railroad, the state of Illinois, Cook county, and the city of Evanston will share the cost. Present viaduct, 72 ft 4 in. long, built in 1909, passes under, at right angles, the C&NW's three main tracks and one spur.

The new viaduct will permit the traffic of two intersecting streets to pass under the C&NW on separate roadways instead of one common roadway. Length of the new viaduct's east portal will be 197 ft and the west portal 323 ft 11 in. Relocation of team track and freighthouse facilities are also involved.

Great Northern.—A $15-million improvement program for 1956 has been approved by the directors. It calls for purchase of new rolling stock (*Railway Age*, Oct. 31, p.16), installation of new centralized traffic control, major track and line improvements and purchase of new electronic and maintenance equipment.

Centralized traffic control will be installed between Willmar, Minn., and Wahpeton Junction, N.D., 115 miles; and between Williston, N. D., and Bainville, Mont., 38 miles. Two line changes will eliminate curvature of nearly four miles of main track in eastern Montana.

New 115-pound rail and one million cubic yards of ballasting will be installed over 172 miles of line. Secondary lines will receive 172 miles of heavier used rail and fastenings.

Abandonments

Authorizations

FLEMINGSBURG & NORTHERN.—To abandon its entire line of railroad from a connection with the Louisville & Nashville at Flemingsburg Junction, Ky., to Flemingsburg, 5.6 miles.

PENNSYLVANIA.—To abandon operation of 4.7 miles of the Shelbyville branch of the Pittsburgh, Cincinnati, Chicago & St. Louis from Dublin Junction, Ind., to Bentonville. The line itself would also be abandoned.

TEXAS & NEW ORLEANS.—To abandon 15.4 miles of its Franklin & Abbeville branch from F&A Junction, La., to Dubois. Construction of a 2.6-mile spur from its main line at Jeanerette to the Patoutville sugar refinery is contemplated.

Organizations

New officers of the **National Association of Railroad and Utilities Commissioners** are: President, B. F. Feinberg, chairman, Public Service Commission of New York; first vice-president, J. C. Hammer, chairman, Tennessee Public Service Commission; second vice-president, E. R. Thornton, member, New Hampshire Public Utilities Commission.

Railway Officers

ATLANTIC COAST LINE.—C. M. Llewellyn, Jr., has been appointed industrial geologist at Wilmington, N.C.

S. C. King, trainmaster, Waycross district, at Waycross, Ga., has been appointed superintendent terminals, Sunny Point Army terminal, at Sunny Point, N. C. **L. D. Dew,** road foreman of engines at Florence, S. C., succeeds Mr. King as trainmaster at Waycross.

BALTIMORE & OHIO.—Curtis H. Brown has been appointed auditor capital expenditures at Baltimore, succeeding **Carroll E. Morley,** whose retirement was noted in *Railway Age*, September 12. Mr. Brown was formerly in charge of the analysis and valuation sections of the office of auditor capital expenditures.

BELT OF CHICAGO.—L. P. Holton has been appointed agent and car accountant at Clearing Station, Chicago.

The position of superintendent car service has been abolished.

BOSTON & MAINE.—As reported in *Railway Age* October 31, page 46, **Oliver D. Appleton** has been elected chairman of the board. Mr. Appleton was born January 10, 1905, at New York, and attended Kent (Conn.) School and St. Lawrence University, Canton, N.Y. (1927). He began his business career with the Electric Bond & Share Corp., leaving in 1931 to join Cyrus J. Lawrence & Sons, where he is a partner in the firm and a member of the New York Stock Exchange. From February 1941 to October 1945, he served in the ETO with the Fourth Infantry Division, being awarded five battle stars and the Bronze Star with Cluster.

Oliver D. Appleton

BURLINGTON.—A. M. Horn, signal supervisor at McCook, Neb., has been named assistant signal engineer at Lincoln, Neb., succeeding **Leo Stueber,** who has retired after 49 years of service.

John D. Schroeder, general foreman at Galesburg, Ill., has been appointed to the newly created position of assistant general superintendent of motive power, Lines East at Chicago.

J. D. Rezner, superintendent car department at Chicago, has been appointed mechanical assistant to vice-president—operation there. **D. V. Hon,** mechanical inspector, replaces Mr. Rezner. **C. E. Melker,** general superintendent motive power at Chicago, has retired after more than 48 years of service.

BUTTE, ANACONDA & PACIFIC.—Robert E. Dwyer has been elected president, with headquarters at New York, to fill the vacancy caused by the resignation of **Cornelius F. Kelley,** who had served as president since December 1919.

CANADIAN PACIFIC.—A. J. Tonks has been appointed car accountant at Montreal, succeeding **O. J. Donaghy,** assigned to special duties.

E. C. Puddington, chief clerk, passenger department, at Toronto, has been appointed district passenger agent at Sudbury, Ont., succeeding **George A. Burt,** who has retired after 41 years of service.

CANADIAN PACIFIC EXPRESS.—W. A. Turgeon, assistant general agent at Montreal, has been named general agent, succeeding **C. J. Driscoll,** who has retired after 50 years of service.

CHESAPEAKE & OHIO.—Arthur S. Genet, vice-president freight traffic, has been named president and chief executive officer of the Greyhound Corporation, parent company of the Greyhound bus lines, effective January 1, 1956. Mr. Genet has been with the C&O since June 20, 1946, and has been a vice-president since January 1, 1947. Prior to joining the C&O, he was president of the National Carloading Company.

CHICAGO & EASTERN ILLINOIS.—W. R. Hill, trainmaster at Salem, Ill., has been appointed superintendent at Danville, Ill., succeeding **C. G. Rodgers,** whose appointment as vice-president and general manager was announced in *Railway Age*, October 10, page 54. Mr. Hill's successor is **R. D. Spicer,** trainmaster at Danville.

CHICAGO & ILLINOIS MIDLAND.—George D. Wilson has been appointed purchasing agent at Springfield, Ill., with jurisdiction over the purchasing and stores department, to succeed **Harry J. Hadden,** who retired October 1 after 40 years of railroad service.

CHICAGO & NORTH WESTERN.—Edgar Vanneman, Jr., general attorney, has been appointed assistant general solicitor. **Gerald M. Chapman,** attorney, has been advanced to assistant general attorney, and **J. J. Hillman,** attorney, has become commerce attorney.

CHICAGO & WESTERN INDIANA.—G. E. Martens, head accountant, has been appointed assistant auditor at Chicago, succeeding **Alfred Schmidt,** deceased.

ERIE.—David H. Decker, division car foreman at Jersey City, N.J., has been promoted to shop superintendent at the Susquehanna, Pa., coach shop, succeeding **Lawrence H. Creighton,** who retired November 1 after more than 43 years of service.

John A. Hosty, commercial agent at Dallas, Tex., has been appointed general agent at Houston.

GREAT NORTHERN.—Samuel M. Farrell, general passenger agent, has been named assistant passenger traffic manager at St. Paul, succeeding **Arthur L. Johnston,** who retired October 31 after 37 years of service. **Cyrus M. Cornelius,** assistant general passenger agent has been promoted to general passenger agent, and **Raymond J. Class,** general agent, passenger department, has been advanced to assistant general passenger agent.

Roland R. Anderson, assistant general storekeeper at St. Paul, Minn., has been promoted to general storekeeper there, succeeding **J. E. Thraff,** who retired November 1 after 40 years of service. **Gilbert H. Patterson,** assistant to general storekeeper, succeeds Mr. Anderson as assistant gen-

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FRISCO.—Frank L. Coulter (above) and Howard H. Knuth (below), who have been promoted to freight traffic managers of new regional traffic offices at San Francisco and St. Louis, respectively, as reported in *Railway Age*, October 17, page 46

eral storekeeper and has been replaced by **Harley J. Sprague,** division storekeeper at Minot, N. D.

GULF, MOBILE & OHIO.—T. C. Adams has been appointed auditor passenger and station accounts at Mobile, Ala., succeeding **G. A. Rush,** who was promoted to assistant comptroller in July 1954.

ILLINOIS CENTRAL.—James F. Monger, superintendent of the Burnside Shop at Chicago, retired September 30 after 43 years of service.

Keith R. McCullagh, traveling freight agent at Sioux City, has been appointed assistant general industrial agent at Chicago, effective November 1.

ILLINOIS TERMINAL.—Melvin F. Eshing has been appointed assistant general freight agent (rates and routes) at St. Louis, succeeding **Milton H. Smith,** who has resigned.

JERSEY CENTRAL LINES.—William F. Hanlon, general solicitor at New York, left the road September 1 to enter private practice as a member of the Asbury Park, N.J., law firm of Hanlon, Argeries, Crahay & Smock, which will represent the JCL as solicitor. **Earl E. Harrington,** commerce counsel, and **Vincent E. McGowan,** assistant general solicitor, have been appointed general attorneys. **Theodore A. Kelly,** formerly with the **Lehigh Valley,** has joined the Jersey Central law department as attorney.

KANSAS CITY SOUTHERN.—George M. Switzer, trainmaster at Pittsburg, Kan., has been appointed superintendent, Southern division at Shreveport, La., succeeding **R. M. Blaydes,** who has retired after 42 years of service. Mr. Switzer's successor is **J. L. Deveney.**

Harry W. Denbo superintendent of terminals at Port Arthur, Tex., has been appointed assistant to president at Beaumont, Tex., succeeding **George P. Williams,** who retired October 16.

As *Railway Age* announced September 12, page 72, **H. W. Gilbert** has been appointed freight traffic manager in charge of rates and divisions at Kansas City, Mo. Mr. Gilbert entered railway service with the Missouri Pacific in 1904. He joined the KCS in 1919 as rate and division clerk in the freight traffic department at Kansas City, subsequently holding various positions in that department. In 1946 he was named general freight agent, which position he held at the time of his appointment as freight traffic manager.

LACKAWANNA.—Lawrence L. Larsen, chief engineer of the Marine department, has been appointed superintendent of that department at Hoboken, N. J., succeeding **Captain Frank H. Cogan,** who retired October 31 after 48 years with that road.

LEHIGH VALLEY—M. R. Freeman, district freight agent at Seattle, Wash., has been appointed assistant freight traffic manager at Detroit, succeeding **H. S. Wilson,** deceased **Lester F. Lybarger,** commercial agent at St. Louis, succeeds Mr. Freeman as general agent at Seattle.

MAINE CENTRAL.—Wesley M. Martin, track supervisor at Brunswick, Me., has been promoted to division engineer at Bangor, succeeding **Harry Homans,** who retired September 15, after more than 44 years of service.

George H. Ellis has been appointed auditor revenue at Portland, Me., and all matters pertaining to freight, passenger, station accounts and overcharge claims (including September freight and passenger interline accounts) should be addressed to him. **Carlton W. Baldwin** has been named assistant auditor revenue.

Complete separation of departmental and supervisory personnel of this road from the Boston & Maine will be effected with the completion of transfers of personnel in all branches of the two roads' accounting departments. An agreement with the Brotherhood of Railway Clerks covering seniority rights of transferred employes was signed by both roads. Sole exception to the complete separation is George H. Hill, who will continue in charge of public relations and publicity for both the B&M and MC.

MILWAUKEE.—C. V. Lund has been appointed assistant to chief engineer at Chicago.

Laurin Cowling, traveling freight agent at San Francisco, has been appointed district freight and passenger agent in charge of a newly opened traffic department agency at Sacramento, Cal. **J. D. Hotchkiss,** traveling freight and passenger agent, and **Donald M. Weisman,** city freight agent, have been appointed district passenger agents at Denver and Salt Lake City, respectively.

R. L. Hicks, L. H. Walleen, and **R. H Love** have been appointed assistant superintendents, Hastings and Dakota division at Montevideo, Minn., Iowa division at Perry, Iowa, and second district, Milwaukee division at Green Bay, Wis., respectively.

W. F. Bannon, trainmaster at Mobridge, S.D., has been advanced to special assistant to vice-president—operation at Chicago. **D. P. Valentine,** trainmaster at LaCrosse, Wis., has been appointed assistant superintendent of transportation at Seattle, Wash. **R. W. Graves,** assistant superintendent Milwaukee Terminals, has been named assistant superintendent Chicago Terminals at Bensenville, Ill., succeeding **R. W. Riedl,** who has become assistant superintendent of the LaCrosse and River division at LaCrosse.

The following have been appointed trainmasters: **N. W. Soergel,** Trans-Missouri division, at Mobridge, S.D.; **E. A. Duszak,** Iowa and Southern Minnesota division, first district at Austin, Minn.; **R. L. Tewell,** Chicago Terminals at Bensenville, Ill.; **S. O. Jones,** Milwaukee Terminals, and **W. J. Peta,** Iowa division, at Marion, Iowa.

A. S. Price, traveling freight agent at San Francisco, has been appointed district freight and passenger agent in charge of a new traffic department agency at Oakland, Cal.

Charles R. Schwarz, supervisor signals and communications at Milwaukee, retired October 31 after 42 years of service.

MINNEAPOLIS & ST. LOUIS.—L. S. Nichols, freight traffic manager—divisions at Minneapolis, has retired after 45 years of service, and the rate and tariff bureau has been reorganized. **Charles B. Kerr,** freight traffic manager—rates, has been named general freight traffic manager—rates and divisions. **J. A. Swanson,** general freight agent, has been promoted to freight traffic manager—rates and divisions. **J. A. Connelly,** assistant general freight agent at Chicago, has become general freight agent—rates and divisions at Minneapolis. **Samuel Rubenstein,** chief of tariff bureau, has been promoted to assistant general

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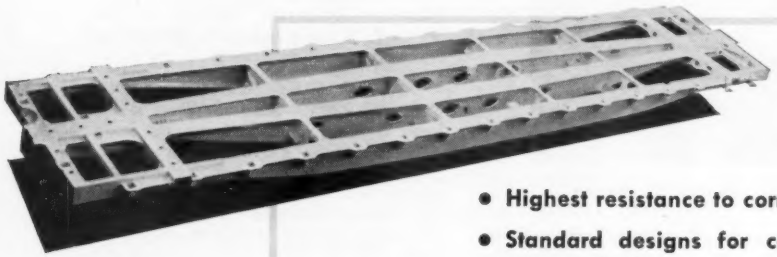

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freight agent—rates and divisions, and **H. E. Falldin,** tariff clerk, has been named chief of division bureau.

MISSOURI PACIFIC. — W. F. Duncan has resumed his duties as terminal master mechanic at North Little Rock, Ark., after a leave of absence because of illness (*Railway Age*, August 15, page 53). **G. W. Niemeyer,** acting terminal master mechanic during Mr. Duncan's absence, has resumed as road master mechanic at North Little Rock, succeeding **H. E. Jamison.**

MISSOURI - KANSAS - TEXAS.— H. Q. Smith has been appointed superintendent dining service at San Antonio, succeeding **C. E. Bulkley,** director dining service and commissary departments, who has been named assistant general manager of the Missouri, Kansas & Texas Transportation Company. The position of director dining service and commissary departments has been abolished.

A. Gordon Hanau has been appointed insurance manager at St. Louis, replacing the late **J. N. Kreyling.**

The following appointments have been announced by the newly reorganized and expanded **Missouri, Kansas & Texas Transportation Company: T. F. Behler,** former vice-president, has been appointed vice-president and general manager; **C. E. Bulkley,** assistant general manager, and **R. R. Chavis,** general traffic manager.

MONON.—Charles R. Phillips has been appointed manager Trailer Maid operations at Chicago.

NEW HAVEN.—Thomas J. Gilhooly, traffic representative at Detroit, has been appointed general traffic agent there, succeeding **Robert S. Eaton,** who has retired after 47 years of service with the New Haven.

Donald S. Onnen

Donald S. Onnen has been appointed assistant chief mechanical officer in charge of engineering and mechanical matters entailed in application of the New Haven's new low-center-of-gravity equipment, and **William A. Baker** also has been appointed assistant chief mechanical officer and will be in charge of locomotive maintenance. Both are newly

William A. Baker

created positions at New Haven. Mr. Onnen was formerly application engineer with the General Electric Company at Erie, Pa., and Mr. Baker was general diesel supervisor of the **Clinchfield** at Erwin, Tenn.

NEW YORK CENTRAL.—Irving A. Olp, superintendent at Watertown, N.Y., has been appointed superintendent of the **Boston & Albany** at Boston. **Robert D. Timpany,** assistant superintendent at Albany, N.Y., has been named superintendent of the St. Lawrence, Adirondack and Ottawa

Martin W. Amoss

divisions at Watertown. **David B. Fleming, Jr.,** trainmaster of the Mohawk and Hudson divisions at Utica, N.Y., succeeds Mr. Timpany as assistant superintendent of those divisions at Albany. **Frank J. Stipek,** supervisor of freight houses at Syracuse, N.Y., has been appointed trainmaster of the **Boston & Albany** at Allston, Mass., succeeding **William V. Hayes,** who replaces Mr. Fleming at Utica. **George L. Barnes** has been appointed supervisor of safety, Lines East and Boston & Albany districts, at Syracuse.

R. J. Parsons has been appointed assistant master mechanic at East Syracuse, N.Y., succeeding **G. M. Beischer,** transferred.

The NYC has taken over operation of Despatch Shops, Inc. at East Rochester, N.Y., and will include the repair work now being performed at East Buffalo Car Shop and Merchants Despatch Transportation Corporation's West Yard, East Rochester. The shop operation is under the jurisdiction of **G. R. Gividen,** general superintendent of shop, East Rochester Car Shop. **O. L. Easton,** shop superintendent at East Buffalo, succeeds Mr. Gividen as general superintendent of shops, Beech Grove shops, Big Four, at Indianapolis, Ind.

Martin W. Amoss has been appointed superintendent of yards and terminals. He was formerly superintendent of the NYC subsidiary Chicago, River & Indiana, and has been succeeded in that position by **W. J. Barry,** who has been named acting superintendent.

Arthur B. Shenefelt, director of public relations of the Brotherhood of Locomotive Engineers at Cleveland, will join the NYC November 15 as director of press relations at New York. **John E. Salter,** assistant director of the News Bureau, has been named director of special events at New York.

R. J. Crane, chief engineer at New York, has retired after 37 years of service.

D. R. Craft has been appointed assistant to chief mechanical officer—labor relations at New York. The position of assistant supervisor personnel has been abolished.

Frederick E. Weaver, trainmaster of the Syracuse—Rochester division at Syracuse, N. Y., has been appointed assistant superintendent of the New York Terminal district at West 72nd street, New York, succeeding **W. R. Horton,** who has been promoted to superintendent of the Cleveland (Ohio) division. **John F. Keefe,** assistant trainmaster of the Syracuse—Rochester division at De Witt, N. Y., succeeds Mr. Weaver as trainmaster at Syracuse.

NEW YORK, SUSQUEHANNA & WESTERN.—Andrew Den Bleyker, assistant chief engineer, has been appointed chief engineer at Paterson, N.J., effective September 15, succeeding the late **O. A. C. Thorsen** (*Railway Age*, September 12, page 76). Mr. Den Bleyker was born at Paterson July 23, 1908, and received his engineering degree from Newark College of Engineering. He began his railroad career with the Erie in April 1937 as rodman in the division engineer's office at Jersey City, N.J. His work took him on the NYS&W in addition to the Erie. Mr. Den Bleyker worked as signal helper, work equipment operator, carpenter helper and levelman on the New York division and sidelines. When the Susquehanna started operating on its own in March 1940, Mr. Den Bleyker became level-

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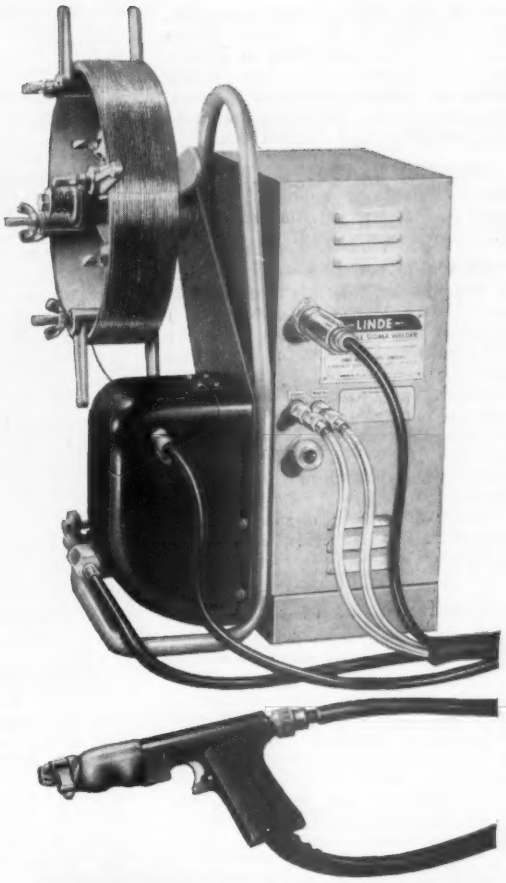

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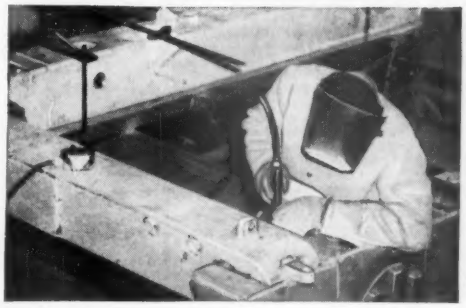

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man in the engineering department. After service in the United States Navy from November 1942 to December 1945, he returned to the Susquehanna as assistant engineer, engineering department, becoming assistant chief engineer last August 29.

NICKEL PLATE. — John C. Sproul has been appointed general agent at Birmingham, Ala., succeeding **H. B. West,** deceased.

PENNSYLVANIA.—The new plan of organization of this road's managerial setup, effective November 1 (*Railway Age,* October 10, page 46) has resulted in establishment of nine regions, each headed by a regional manager. The Pittsburgh and Chicago regional managers also have the title of vice-president. Staff members of the New York and Philadelphia regions were reported in *Railway Age,* October 31, page 47.

The staff of the Chesapeake region, headed by **J. A. Schwab,** will include:

V. H. McLean, asst. regional manager;
W. G. Pfohl, supt.—transportation;
J. H. Ball, asst. supt. transportation—train movement;
D. S. Johnson, supervisor—transportation engin er ing;
C. Weber, freight train master (Baltimore);
J. B. Shaw, train master and road foreman of engines (Delmar);
J. A. Foshee, train master (Delmar);
A. J. Dubs, passeng r train master (Baltimore);
W. P. Primm, road foreman of engines (Baltimore);
R. H. Callis, boatmaster (Cape Charles);
J. S. Bell, supt.—equipment;
C. W. Garmon, supervisor car equipment;
C. S. Kifer, supervisor—methods and cost control;
D. R. Knoff, supervisor—diesel equipment;
T. J. Sheridan, master mechanic (Wilmington);
R. E. Pinkham, master mechanic (Baltimore);
C. R. Bergman, regional engineer;
J. A. Jorlett, engineer—structures;
K. M. Lockerby, engineer—communications and signals;
D. R. Wolfe, supervisor—methods and cost control;
W. R. Taggert, supervisor—M. W. material and equipment;
A. S. Barr, district engineer (Baltimore);
T. J. Murray, district engineer (Delmar);
W. F. Hoagland, mgr.—freight sales and service;
F. B. Kraus, supervisor—freight service;
R. H. Hance, supt.—freight stations;
H. W. Beers, Jr., supervisor—freight handling;
R. C. Rhodes, supervisor—clerical operations;
R. F. G. Meyer, district sales manager (Wilmington);
J. M. C. Collins, district sales manager (Norfolk);
W. K. Boyd, district sales manager (York);
W. K. Howard, district sales manager (Washington);
E. R. North, district sales manager (Baltimore);
F. J. Roth, passenger manager;
J. V. Sowers, passenger manager—Washington;
W. N. Pippin, district passenger manager (Wilmington);
R. B. Stoll, district passenger manager (Baltimore);
W. K. Jarvis, district passenger manager (Norfolk);
B. A. Henry, district passenger manager (Miami);
F. Siedler, superintendent—personnel;
W. H. Flayhart, supervisor—labor relations;
W. R. Dunn, Jr., mgr.—real estate;
C. E. Taylor, mgr.—public relations;
A. J. Rolleri, mgr.—industrial development;
B. E. Winsor, asst. mgr.—industrial development;
K. U. Becker, regional claim agent;
J. W. Hinkleman, budget supervisor;
A. C Fasolas, chief of police.

P. W. Neff will head the Northern region, the staff of which will include:

E. P. Adams, supt.—transportation;
J. J. Delaney, Jr., supervisor—transportation engineering;
C. W. Liming, supervisor train movement;
J. K. McConnell, train master (Williamsport);
J. C. Sperry, train master (Buffalo);
T. G. Griffin, train master (Erie);
C. F. Mackall, road foreman of engines (Williamsport);
P. D. Vaughn, road foreman of engines (Buffalo);
E. C. Hanly, supt.—equipment;
J. K. Sherwood, supervisor—car equipment;
N. L. Butters, supervisor—methods and cost control;
M. J. Mitchell, supervisor—diesel equipment;
C. A. Korn, Jr., master mechanic (Williamsport);
P. E. Geise, master mechanic (Buffalo);
C. R. Montgomery, regional engineer;
H. P. Greene, engineer—structures;
J. E. K. Krylow, engineer—communications and signals;
R. E. Gorsuch, supervisor—methods and cost control;
A. H. Stimson, supervisor—M. W. material and equipment;
W. R. Garn r, district engineer (Williamsport);
C. H. Kooser, district engineer (Buffalo);
D. J. Moynihan, mgr.—freight sales and services;
G. E. Krieg, supervisor—freight service;
P. S. Keegan, supt.—freight stations;
J. R. Miller, supervisor—freight handling;
M. H. Naus, supervisor—clerical operations;
F. B. Vandegrift, district sales manager (Williamsport);
R. G. Lange, district sales manager (Scranton);
F. B. Hoffman, district sales manager (Elmira);
L. J. Moran, district sales manager (Erie);
A. W. Lenhard, district sales manager (Rochester);
D. J. Collins, district sales manager (Buffalo);
J. W. Miller Jr., passenger manager (Buffalo);
D. L. Moore, superintendent—personnel;
R. J. Sullivan, supervisor—labor relations;
A. M. Highgate, supervisor—personnel;
O. M. Biehle, mgr.—real estate;
Dr. W. J. Gerstle, regional medical officer;
C. J. Muldoon, Jr., mgr.—public relations;
A. J. Fierst, asst. mgr.—industrial development;
H. A. Faulhaber, regional claim agent;
E. L. Vossler, budget supervisor;
R. J. Cusick, chief of police.

PITTSBURGH & WEST VIRGINIA.—Roland J. Albrecht has been appointed general agent at Kansas City, Mo., a newly created office, effective November 1.

PULLMAN COMPANY.—Barton N. Lewis, assistant chief mechanical officer, has been appointed acting chief purchasing and stores officer at Chicago.

RAILWAY EXPRESS AGENCY. —Robert J. Fletcher, general solicitor, has been appointed vice-president and general counsel at New York, succeeding **John H. Mooers,** who retired October 31 after 44 years in the express industry. Mr. Fletcher was born at Jackson, Miss., December 30, 1909, and was graduated from Princeton University (B.S.1932) and Yale University Law School (LL.B.1935). Mr. Fletcher was attorney for the Reconstruction Finance Corporation from 1935 to 1938, then served as attorney for Frank W. Gwathmey, special counsel for the Atlantic Coast Line, the Seaboard, and other roads. He joined the Boston & Maine at Boston in 1943 as commerce counsel, subsequently serving as general attorney and general counsel, successively. Mr. Fletcher joined REA last year as general solicitor.

Robert J. Fletcher

ROCK ISLAND. — Robert F. Newton, assistant superintendent, electric operations of the **Great Northern** at Wenatchee, Wash., has been named electrical engineer of the Rock Island at Chicago, succeeding

Robert F. Newton

L. C. Bowes, who has retired after 39 years of service.

Lloyd L. Thoms, assistant freight traffic manager at Chicago, has been named southeastern freight traffic manager at Atlanta, Ga., in charge of a newly created freight traffic district.

RUTLAND.—John J. Mullen, freight representative, has been promoted to general agent at Rutland, Vt.

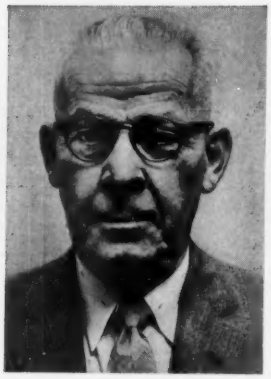
SANTA FE.—Emmet Trainor, general attorney at Chicago, retired October 31.

SEABOARD.—H. S. Coltrain, commercial agent at Miami, Fla., has been appointed district freight and passenger agent at Lake Wales, Fla., succeeding **H. W. Heppeler,** who retired November 1 after 33 years of continuous service.

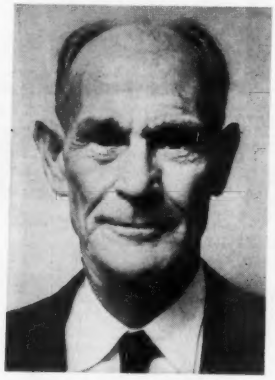
SEATRAIN LINES, INC.—Clarence W. Goldstein, general western freight agent at St. Louis, will retire November 17 after more than 27 years of service.

Harry J. Johnson, general freight agent—New Orleans operations manager at New Orleans, has been promoted to the newly established position of freight traffic manager—special duties at New York. Responsibilities of **S. T. Suratt, Jr.,** freight traffic manager—sales and **W. J. Mathey,** freight traffic manager—rates at New York, are not affected by Mr. Johnson's assignment. **C. T. Grace,** southeastern freight agent at Atlanta, succeeds Mr. Johnson at New Orleans as general freight agent. **C. L. Adams,** district freight agent at Savannah, succeeds Mr. Grace at Atlanta. **J. P. Hebert,** operations assistant at New Orleans, succeeds Mr. Johnson as operations manager there.

SOUTHERN. — Howard Cook, assistant general freight agent at Augusta, Ga., has been appointed as-



TEXAS & NEW ORLEANS.—J. L. Stone, assistant auditor (above), who has been appointed secretary, and R. F. Davis, assistant auditor (below), who has become auditor (*Railway Age*, September 26, page 48).



sistant freight traffic manager at Greensboro, N. C., succeeding **Charlie C. Elder,** who retired November 1 after more than 50 years of service. **James O. Lowe,** commercial agent at Boston, Mass., has been named district freight agent at New York, succeeding **Robert H. Baily,** who replaces **Kenneth B. Hill,** with the same title as heretofore. Mr. Hill, district freight agent at New York, has been transferred to Jacksonville, Fla., succeeding **Turnbull Bernard,** who has been named division freight agent at Macon, Ga. Mr. Bernard replaces **Jerry L. Townshend,** who has been appointed general industrial agent at Birmingham, Ala., succeeding **Eugene B. Spence,** who replaces Mr. Cook as assistant general freight agent at Augusta.

TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS.—Henry Miller, Jr., acting director of personnel, has been appointed manager, labor relations. **John A. Wicks,** director of personnel, has postponed his retirement and will act as consultant to Mr. Miller. The position of director of personnel has been abolished.

WESTERN MARYLAND.—Edward J. Chapman, special agent, has been named chief special agent for the system, including Port Covington and other Baltimore facilities, succeeding the late **John Zang.**

WESTERN PACIFIC.—Charles K. Faye, assistant freight traffic manager, has been appointed freight traffic manager, system sales and service at San Francisco. **David H. Copenhagen** has been named traffic manager, Metropolitan region, and **Stanley**

Charles K. Faye

E. Dinkel has become traffic manager, Western region, both at San Francisco. **H. R. Coulam** has been appointed traffic manager, Intermountain region, at Salt Lake City, while **John H. Coupin** has been named assistant to vice-president—traffic at San Francisco. **Russell J. Cleland** has been appointed general freight agent; **John C. Nolan,** assistant to freight traffic manager; **Peter Citron,** general agent; **Winton V. Hanson,** foreign freight agent; **Arthur M. Allen,** office manager, and **Sheldon Glatt,** assistant industrial agent, all with headquarters at San Francisco.

A. L. Herbert, assistant signal engineer at San Francisco, has been appointed signal engineer there.

OBITUARY

A. C. Browning, former secretary, Mechanical Division, **Association of American Railroads,** died October 1 at Tryon, N. C.

Briefly . . .

. . . **Rand McNally & Co.,** printer of more than 5,000,000 railroad timetables and publisher of railroad maps since 1872, will observe its 100th anniversary next year with several publishing projects and a two-day centennial program at Chicago featuring speakers from government, transportation, communications, banking, education and the graphic arts.

Current Publications

PAMPHLETS

AIR TRANSPORT FACTS AND FIGURES, 16th Edition, 1955. 19 pages. Air Transport Association of America, 1107 Sixteenth st., N.W., Washington 6, D.C. Free.

SIGNS OF LIFE PROGRAM. 1954 Report of the Highway-Railroad Crossing Committee, Railroad Section, National Safety Council. 8 pages. National Safety Council, 425 N. Michigan ave., Chicago 11. Free.

OCCUPATIONAL SAFETY SERVICES GUIDE. 68 pages, illustrations. National Safety Council, 425 North Michigan ave., Chicago 11. Single copies free.

A complete catalog of accident prevention aids available from the NSC; it lists all council periodicals, newsletters, films, posters, prepared safety talks and other materials and services available to the safety supervisor. The guide is subdivided by industry and topic for quick reference.

FOLLOW-UP STUDY OF FORMER APPRENTICES. 17 pages. Publications branch, Bureau of Apprenticeship, U.S. Department of Labor, Washington 25, D.C. Free.

Why do some apprentices quit before completing their apprenticeship? What happens to them after they drop out? Answers to these and other questions are contained in this sample survey of persons who discontinued apprenticeship training programs during 1951 and 1952.

THE AMERICAN RAILWAY INDUSTRY, by Carlton J. Corliss. 26 pages. Bellman Publishing Company, P.O. Box 172, Cambridge 38, Mass. $1.

This is one of a series of vocational and professional monographs used in connection with guidance activities wherever general counseling work is conducted and for individual reference purposes in the choice of a career. It includes a brief survey of the railway industry and railway organization. The remainder of the booklet is devoted to railroad employment and discusses the range of employment, compensation, labor unions, qualifications of a railroad man, opportunities for advancement, seniority, and how to seek a railroad job.

GETS THERE SAFE 'N EASY. 16 pages. National Wooden Box Association, Barr bldg., Washington 6, D.C. Single copies, free.

A cartoon-type fact booklet to emphasize the wide range of uses for nailed wooden boxes and crates. It utilizes industrial shipping boxes, appliance crates, beverage cases and fruit and vegetable containers to illustrate markets still served by nailed wooden boxes and crates despite vigorous competition from competing types of containers.

RAILWAY ELECTRIFICATION IN SWITZERLAND, with special reference to the Swiss Federal Railways and Their Rolling-Stock, by H. Loosli. 78 pages, illustrations, maps, dia-

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STATEMENT required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233) showing the ownership, management, and circulation of Railway Age published weekly at Orange, Connecticut, for November 7, 1955.

1. The names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, Simmons-Boardman Pub. Corp., 30 Church St., New York 7, N. Y.

Editor, James G. Lyne, 30 Church St., New York 7, N. Y.

Managing editor, C. B. Tavenner, 30 Church St., New York 7, N. Y.

Business manager, J. R. Thompson, 79 West Monroe St., Chicago 3, Ill.

2. The owners are: Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N.Y. Stockholders of one percent or more, James G. and Louise Lyne, 30 Church St., New York 7, N.Y., Arthur J. McGinnis, 30 Church St., New York 7, N. Y., Joseph S. and Clarice Crane, 30 Church St., New York 7, N.Y., Frederick A. and Artimese B. Clark, 30 Church Street, New York 7, N.Y., Samuel O. and Carrie E. Dunn, 79 West Monroe St., Chicago 3, Ill., Edward G. & Elizabeth Gavin, 79 West Monroe St., Chicago 3, Ill., Joseph or Katherine Sanders, 2909 Maple Ave., Dallas 4, Texas, John R. Thompson and Kathe Thompson, 79 West Monroe St., Chicago 3, Ill., Mae E. Howson, 6922 Paxton Ave., Chicago, Ill., Ella L. Mills and Catherine S. Mills, Westfield, N. J., Ruth Wheaton Johnson, 1615 Ravenna Blvd., Seattle 5, Wash., William E. Russell as Trustee L/W/T of Ida R. Simmons F/B/O, Mrs. E. S. Fenton, % Russell and Russell, 41 East 42nd St., New York 17, N.Y., J. Streicher & Co., 2 Rector St., New York, N. Y., Partners of J. Streicher & Co. are: Joseph Streicher, Jack L. Streicher, Ethel Streicher, Judson Streicher all of 2 Rector St., New York, N.Y., J. V. McManus, 39 Broadway, New York, N.Y.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

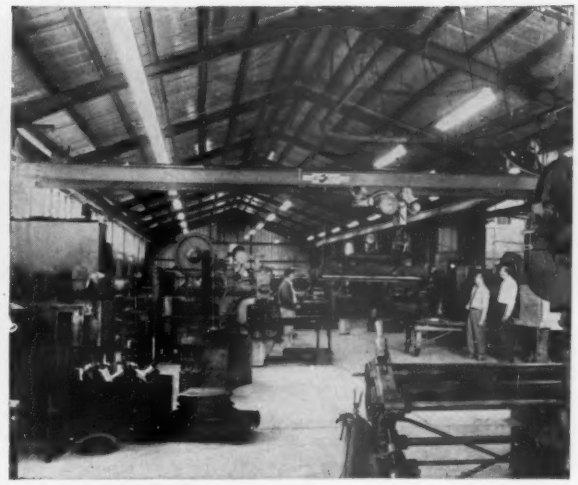
5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.) 15,171.

JAMES G. LYNE,
Editor.

Sworn to and subscribed before me this 22nd day of September, 1955.

EDMOND J. PUYDAK

[SEAL] (My commission expires March 30, 1957)



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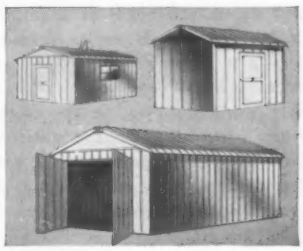

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grams. Swiss Federal Railways, Mittelstrs. 43, Berne, Switzerland. No price given.

Althouh Mr. Loosli read this paper before the Institution of Locomotive Engineers at Leeds on May 22, 1952, it has only recently been published by the Swiss Federal Railways to fill a long-felt want for technical details of electrification in Switzerland. It covers the layout of the Swiss Railway system, introduction and development of electric traction in Switzerland, the energy supply system, and the locomotives, motor coaches and railcars in use.

TOWARD STEADIER WORK AND PAY. 24 pages. National Association of Manufacturers, 2 E. 48th st., New York 17. Free.

A new study designed to assist employers in achieving greater job security—through time-tested techniques—for millions of American workers. In addition to giving practical advice in setting up job stabilization programs, the booklet provides employers with helpful information on actual dollar-and-cents savings which are possible through employment regularization. It explains how steady jobs cut employment compensation costs, overhead costs, and maintenance costs, and increase efficiency, productivity and morale. In many states the unemployment compensation tax rate may be considerably reduced by regularizing employment, according to the NAM booklet, and in 10 states it is possible to achieve a "zero" rating under which no tax is paid. The booklet lists more than 100 resultful ideas and practical techniques.

TABULATION OF STATISTICS PERTAINING TO SIGNALS, INTERLOCKING, AUTOMATIC TRAIN CONTROL, TRAIN OPERATION BY TIMETABLE AND TRAIN ORDERS, AND TRAIN COMMUNICATION SYSTEMS AS USED ON RAILROADS OF THE UNITED STATES, January 1, 1955. 23 pages. Compiled by Bureau of Safety and Service, Interstate Commerce Commission. Available from Government Printing Office, Washington 25, D.C. 25 cents.

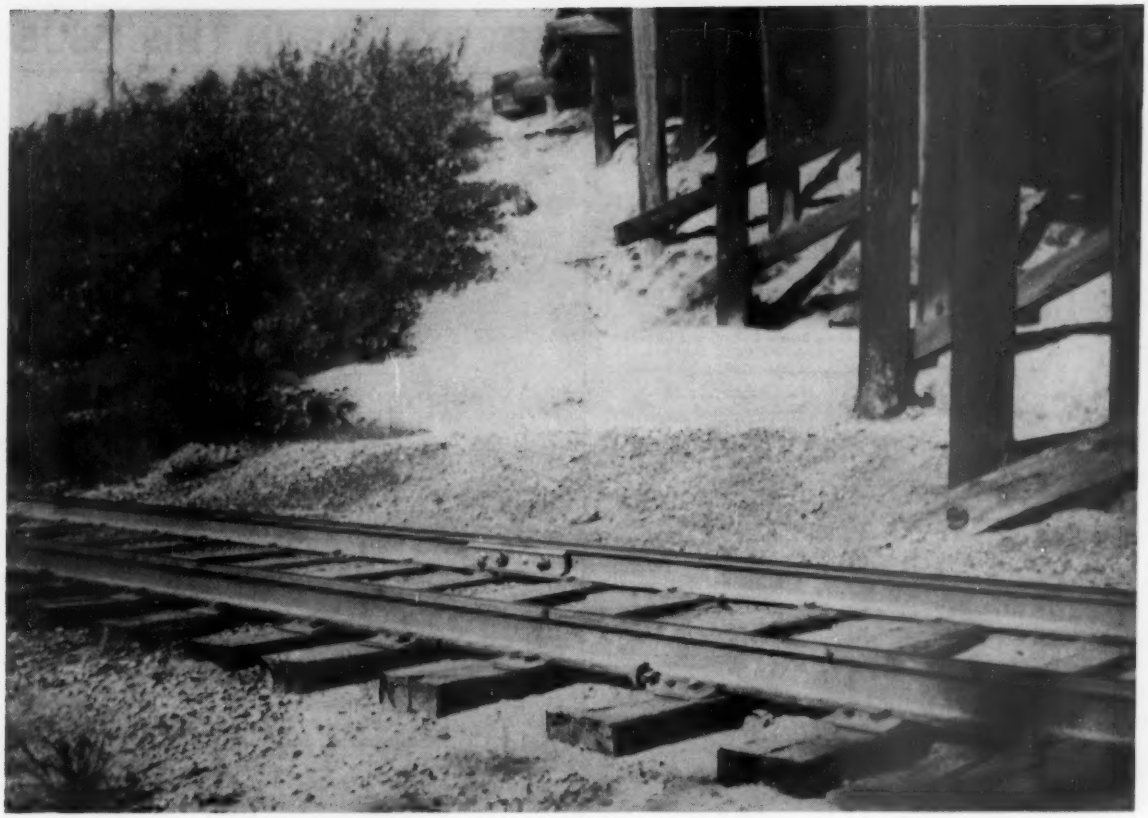
VERMONT, THE ANSWER TO NEW ENGLAND'S GREAT CEMENT PROBLEM. 16 pages, illustrations. Rutland Railway Corporation, Industrial Development Department, Rutland, Vt. Free.

Contains facts to indicate the advantages of locating a cement plant in Vermont.

JOINT EQUIPMENT COMMITTEE [REPORT ON] COSTS OF RAILROAD EQUIPMENT AND MACHINERY, July 1, 1955. 23 pages. Association of American Railroads—Finance, Accounting, Taxation and Valuation department, Transportation bldg., Washington 6, D.C. Free.

SIERRA RAILROAD, by Arthur C. Hender. 39 pages, illustrations, map. Western Railroader, P.O. Box 668, San Mateo, Cal. $1.

A brief history of the Sierra Railroad, issued upon the occasion of the "Farewell to Steam" excursion sponsored by the Pacific Coast Chapter of the Railway & Locomotive Historical Society, April 17, 1955.



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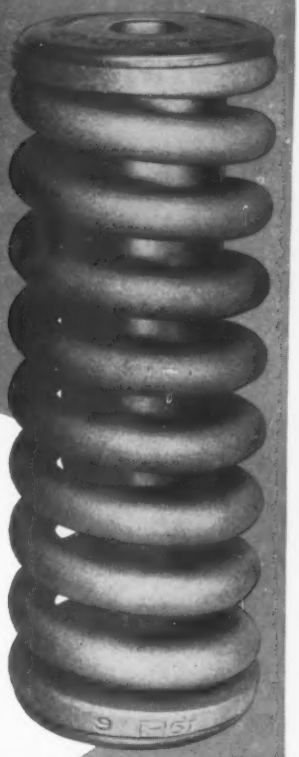
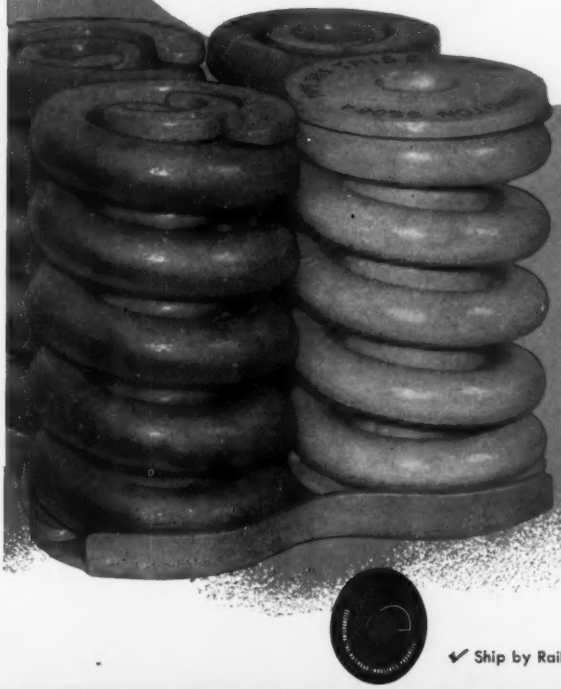


Symington®

SNUBBERS

FOR FREIGHT and PASSENGER EQUIPMENT



MODERNIZE OLD FREIGHT CARS with TYPE SBS SNUBBERS

1. Protect lading by control of harmonic spring action.
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The **TAPER** makes Timken® the only journal bearing that **DELIVERS** what you expect when you buy a roller bearing

THERE are two major reasons for putting freight car journals on roller bearings. To end the hot box problem, and to cut operating and maintenance costs to the bone. The Timken® tapered roller bearing is the only journal bearing you can count on to do both of these things. Here's why:

(1) *No lateral movement within the bearing.* Because of the taper, there's no lateral movement to pump lubricant through the seal and out of the journal box, no scuffing of rollers and races to shorten bearing life.

(2) *Positive roller alignment.* The taper in Timken bearings holds ends of rollers snug against the rib, where wide area contact keeps them properly aligned. Rollers can't skew to upset full line contact.

Unlike costly "crutch" devices that merely attempt to improve friction bearing performance, Timken tapered roller bearings *cure* the hot box problem, because they eliminate its cause, the friction bearing itself. Timken bearings deliver maximum savings in operating and maintenance costs, too. For example, terminal bearing inspection time is cut 90%, lubricant cost is reduced as much as 89%. And the new Timken *heavy-duty* type "AP" (All-Purpose) bearing assembly can go three years without checking and addition of lubricant.

To give them the extra toughness needed for rugged railroad service, Timken bearings are made from our own nickel-rich, fine alloy steel. That gives us an additional quality control. Be sure you get what you pay for when you switch to roller bearings to end the hot box problem and cut operating and maintenance costs to a minimum. Get Timken *tapered* roller bearings. The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ont. Cable address: "TIMROSCO".

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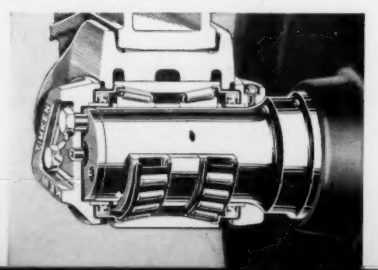

THE TAPER MAKES
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